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AUTHOR Rosenau, Fred S.; McIntyre, Diane H.
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ABSTRACT

This handbook for educators focuses on the packaging of validated educational products or processes as one part of the total diffusion process. Included are the planning, preparation, production, and putting together of all the parts of an effective program so that it will then be transportable to other sites: the package itself focuses principally on the needs and interests of school districts considering the adoption or adaption of the original program. The contents of this handbook, which reflect the current state of a rather new set of education-related activities, are divided into four sections: (1) "Planning the Package" provides an overview of major issues--the purpose, the target population, analysis of package contents--and suggests how to get started; (2) "Staffing, budgeting, and scheduling" offers helpful guidelines for managing package development; (3) "Production considerations" covers many details of producing the actual package components and distributing the finished product; (4) "References" consists of selected practical readings, forms, and charts chosen to help make specific packaging and diffusion decisions. Two case studies of school projects that have already packaged their products are included, along with a brief list of suggested further readings.
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packaging your educational program

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Fred S. Rosenau & Diane H. McIntyre

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PREFACE

This handbook for educators focuses on the processes that a validated exemplary project should follow when its staff is preparing for statewide or national diffusion. The subtitle of this particular "how-to" guide could easily be: How to Use Packaging Technology.

In the sense that we in the public sector use the term,

PACKAGING IS....

only one part of the total diffusion process. When we speak about packaging, we mean the planning, preparation, production, and putting together of all the parts of an effective program so that it will then be transportable to other sites. We assume that linking agents will be among the users of the final package. But the package itself focuses principally on the needs and interests of school districts considering the adoption or adaptation of the components of the original validated program.

The U.S. Office of Education's experience in packaging reaches back to a series of reports called Putting Research into Educational Practice. Although these were published by the Government Printing Office, state education agencies were encouraged to reinterpret or further transform the information to make it more useful to educators. Out of these information packages grew a series of multimedia information units, beginning with the Elementary Science Information Unit and the Early Childhood Information Unit, both produced for USOE and then turned over to national distributing agencies.

Similarly, USOE's Right to Read program produced a set of multimedia packages on 12 effective reading programs; these are currently available from the National Audiovisual Center in Washington.

One of the larger USOE-supported information compilation and dissemination efforts was the development and publication of the ALERT Sourcebook of Elementary Curricula, Programs, and Projects in 1972; this comprehensive catalog was sold both by the Superintendent of Documents and by a commercial distributor. But none of these federal efforts went beyond providing information for curriculum decision-makers.

With the beginning of the National Diffusion Network in 1974, the Office of Education moved for the first time into the stimulation and support of school-district efforts to package validated programs for transfer to other sites. Only projects which were approved by the Joint Dissemination Review Panel of the Education Division of the Department of

Health, Education and Welfare were included in this network's packaging and training experiments. But from the studies of these diffusion endeavors we have begun to learn a modest amount about how packaging technology can be used in the public sector. We have also acquired data from studying the impact of certain programs funded by the National Institute of Education, such as Aesthetic Education and Individually Guided Education.

This admittedly narrow information base has been enlarged in the past three years by the experience gained by USOE's Office of Planning, Budgeting, and Evaluation in its large-scale Project Information Package experiments and evaluations. Six of these management information packages have been studied in actual use by school districts, and an additional group are now ready for release. So this handbook has gleaned much useful background from the developers of those products.

In the following pages we offer to school districts (and to state education agencies and intermediate agencies as well) our tentative conclusions about packaging technology at the end of 1976. Many of the USOE staff have contributed to this publication, but most of the content is built upon actual experience in the field.

We have learned a reasonable number of lessons, and we have shared them with our fellow educators who face packaging challenges. We do not pretend to have all the answers, so we welcome feedback from users now and in the future. In time we expect to revise this first version to include what may be learned by its users in months to come. Comments should be directed to: Dissemination Staff, Bureau of Elementary and Secondary Education, U.S. Office of Education, FOB 6, Room 2031, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

We hope you'll find our work helpful as you now prepare for the diffusion of your educational product or process to other schools that have shown themselves ready to adopt or adapt it to meet their own special needs.

Fred S. Rosenau and Diane H. McIntyre

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INTRODUCTION

This handbook focuses on "packaging," which is one major phase of a total process that can be labelled "diffusion." The term "diffusion" covers a myriad of activities required to plan, produce, evaluate, package, promote, and transport to other localities an educational product or process that will help some group of learners. The actual packaging of an educational product/process falls within a full educational development-through-adoption cycle including the following:

- A. Recognition that a need exists.
- B. Development, including testing and revision, of a useful new educational product or process to meet this need.
- C. Recognition that the new product/process may meet similar needs elsewhere and that an opportunity for use elsewhere may exist.
- D. Validation or review of the product/process at the developer site to verify its effectiveness through expert appraisal or evidence.
- E. Planning and implementing a diffusion strategy for transporting the validated product/process to other sites:
 1. Identifying essential components of the validated process/product to be diffused.
 2. Preparing written and, if necessary, audiovisual materials.
 3. Developing programs to train (a) those who will use the product/process elsewhere and (b) those who can later train additional personnel at future adoption sites.
 4. Producing and delivering components (packaged and human) to interested adopters.
 5. Monitoring selected adopter sites to identify problems, to improve materials and procedures, and to collect impact data.

This handbook is written primarily for project personnel who have completed Step C and/or Step D and are now considering ways to package components of their product/process as part of an overall diffusion plan. The handbook may also interest project personnel who are still in the early stages of development work, but anticipate disseminating their validated product/process at some future time.

Assuming you have already decided to diffuse your program, the first major question to resolve is: "What should your diffusion plan or strategy encompass?" The second major challenge is: "Does our staff have the interest and capability to carry out this

diffusion plan?" This handbook cannot cover all issues involved, but it can provide guidance for the packaging phase of the total diffusion effort. You, however, should definitely take time to sketch out an overall diffusion strategy. Then you can accurately assess what role, if any, packaging will play in relation to your other planned activities. Should any elements of the program be packaged or is the program utterly unsuitable for packaging? Only you can answer this question.

You must plan in advance the degree of impact your program can achieve. Contacts with schools and other educational agencies interested in adopting your program can come about in many different ways. If you plan to diffuse your product/process independently of presently operating networks (such as the National Diffusion Network) or support agents (such as local or regional intermediate agencies or commercial publishers), then you must package accordingly. Regardless of how you expect your materials to be disseminated, the intent and content of your package must be adaptable to the projected distribution mechanisms.

You must also plan for the diffusion services you can afford to supply: producing and packaging needed materials, promoting your project, training (at home or afield), managing staff time, traveling, responding to phone and mail inquiries, maintaining comfortable relationships in your own school district, maintaining an office, and so on. Thus, your packaging effort must be developed in relationship to an overall diffusion plan while at the same time dovetailing with any training and support activities you intend to offer to adopters. The package you develop will save work for your staff and save time for those who later use your program.

Packaging serves several highly important functions for your staff, for your program, and for those individuals or groups who will one day adopt or adapt your successful efforts. First, by packaging all the key elements of your program, (rather than just the instructional techniques), you enable other districts to develop faithful representations of your program's substance and intent. Second, you save time for yourself and your colleagues as you move into other "non-packageable" diffusion activities (training, troubleshooting, etc.). Third, you are more likely to persuade more potential adopters to try your program because they can understand how the materials intended for classroom use and for training adults actually work. Fourth, you solve problems in advance for other educators by giving them the tools they need to do a first-rate job at sites distant from you. Finally, you conserve the funding resources of all concerned by providing ways to

avert mistakes, providing needed tools and techniques, and anticipating problems. A soundly developed package can be one of the best investments you can make in your diffusion planning.

Before proceeding further, consider your own particular position in relationship to packaging. Which of the following descriptions most closely matches your current situation?

- Your project is to be funded for a limited time to package your program for diffusion; nearly all your time, staff, and funding resources are to be devoted to preparing your package (including materials for training key personnel at adopter sites).
- Your project is to be funded to carry out packaging as one task among many (awareness conferences, demonstrations, travel, training, package testing and production, etc.).
- Your project has no external funding to develop materials beyond the point at which they now exist. There is, however, interest and support in your district for packaging your program.

As you proceed through this "how-to" manual, consider the information presented in terms of your situation, your resources, and your constraints. Use this handbook to help in preparing and producing the best possible package for your program within the limitations of your resources (time, personnel, funding).

This handbook is divided into four sections:

- "Planning Your Package" -- Written for the person responsible for overall packaging supervision, this section provides an overview of major issues and suggests how to get started. This planning discussion relates only to packaging your product rather than planning your overall diffusion effort.
- "Staffing, Budgeting, Scheduling" -- Directed to the person responsible for the day-to-day work of producing the package, this section offers some helpful guidelines for managing package development.
- "Production Considerations" -- Intended for anyone concerned with producing the actual components of the package, this section covers many details of producing and distributing a packaged product or process.
- "References" -- Chosen to enrich the background of all educational packagers, this group of selected practical readings, forms, and charts can help meet specific packaging and diffusion challenges. Two case studies of school projects that have already packaged their products are included, along with a brief list of suggested further readings.

The contents of this handbook may prove too detailed for some who are new to the idea of packaging and too skimpy for others who are experienced diffusion personnel. No one handbook can fit everyone's needs. The handbook reflects the current state of a rather new set of education-related activities. It should be viewed as only a preliminary edition, subject to revision as more educational packaging experience is accumulated. There are, however, many people who can provide various types of technical assistance to the beginner in packaging -- the staffs of state facilitator projects and state education agencies, the staffs of intermediate service agencies, and the staffs of experienced developer/demonstrator projects previously validated by the Education Division's Joint Dissemination Review Panel (JDRP).^{*} Many of these organizations are linked together in the U.S. Office of Education's National Diffusion Network (NDN).^{**} The Education Division also hopes to establish some type of support mechanism that can provide technical assistance in packaging. So even the least experienced packaging "beginner" need not feel lost or lonely.

^{*} See Reference section, p. IV-1-15.

^{**} See Reference section, p. IV-16-17.

PACKAGING GOALS

Identify Purpose

What is really meant by packaging? When we speak about packaging, we mean the planning, preparation, production, and putting together of parts of an effective program so that it will then be transportable to other sites. The package you produce may contain some materials you have already developed as part of your program, as well as new materials specially designed to assist adopters. Although we assume that linking agents* will be among the users of the final package, the package should focus principally on the needs and interests of potential users.

Before you begin to plan your package, review the purposes a package can serve and decide which purposes suit your needs within your overall diffusion effort. Commercial and noncommercial packages have been developed to meet the following needs:

Creating Awareness. Awareness itself can have several purposes. Perhaps you just want people to know about your program. This purpose is often foremost where project staff want their project continued as a priority program in their district. Perhaps, though, by creating awareness you aim to stimulate interest leading to action. Will an effective awareness package stimulate local university personnel to offer training programs that complement your program? Or will interested educators from other districts be stimulated enough to go ahead with possible adoption of your program and to seek the services of your staff to provide training and implementation services?

Program Adoption. Packages with this purpose set forth all major components required to duplicate the original program at another site. Some, such as the Project Information Packages (PIPs) recently released by the U.S. Office of Education, represent a significant advance in the concept of packaging information about the management of curriculum programs. These packages, designed as self-contained units, can be used by an adopting district to implement an already-validated educational program with little or no outside consulting help. Other packages with program adoption as their goal are designed to communicate through print and/or audiovisual materials essential information to complement services available from a trained consultant (thus reducing the amount of consultant time required).

* Intermediate facilitators serving as matchmakers between R&D validated options and adopter needs.

Component Adoption. Some projects, believing that only pieces of their program can be packaged, develop packages covering only certain aspects. For example, some have packaged their evaluation system, sharing the computer program and coding schemes. By packaging all the easily explained components that the adopters can master on their own, you help them to maximize use of consultant time by concentrating on those aspects in which training is deemed a necessity.

Staff Training. Some available training packages function as complete, self-contained training courses. They can be used by individuals with general training backgrounds but without specific experience in the program described. Other packages are designed for use by experienced trainers.

Classroom Materials. Many packages of instructional materials for use in classrooms can be found in any school district. Some are fairly simple, usually containing student workbooks and a teacher's manual. Others are far more complex, containing detailed lesson plans, multi-media materials, games, computer programs, etc.

Whichever packaging purpose comes closest to your needs, your packaging effort must fit within your planned diffusion effort. As explained in the Introduction, diffusion supports the transfer of a successful educational practice from its originating site to another site to achieve similar successful results. Your completed package will play an important role, whether you see it assuming the major burden of communicating information or whether it simply complements the activities of your professional staff.

Should You Package?

All programs are packagable, at least to some degree; but some are more easily packaged than others. School programs can be viewed along a continuum from simple to complex. For example, a program that calls for minimum activity in the classroom for a brief period, that can be used by a teacher without special training, and that is low in cost (under \$50) would be viewed as fairly simple in terms of making the decision to use it and actually implementing it. However, a program requiring structural reorganization, extensive instructional time, special inservice training, and outlays of significant resources (thousands of dollars) would be viewed as complex.

If your program fits most of the following categories, your packaging challenge will be more easily met because your program will be viewed as supplemental to existing school programs.

Easy to Implement

- Little or no inservice training required.
- Minimal amount of administrative supervision or coordination needed.
- Cost of materials can be met through funds controlled at the classroom or building level.
- Program contains relatively few components.
- Program designed for trouble-free integration into existing structures.
- Package itself requires only teacher and learner guides.

If your program has some of the following characteristics, however, your packaging effort will be much more difficult because it will probably have to focus on how to manage and train, as well as on what happens to pupils in the teaching/learning situation.

Greater Effort to Implement

- Inservice training heavily emphasized (more than schools are generally accustomed to).
- Program is process or skill oriented, rather than relying solely on curriculum materials.
- Significant reorganization of classrooms and/or personnel required.
- Multiple components present that affect instruction in several areas.
- Implementation costs require district-level review and approval.

Before you can decide how much of your program you'll try to package, you'll need to weigh the type of program you have developed against your available time, funds, and expertise for packaging, and against the role you expect the package to assume in your diffusion plan.

In any event, if you plan to package your full program (as opposed to preparing only a teacher's manual, for example), you'll need to provide information about the organization of your program, the instructional process and any training or experience required, evaluation, home/school/community relationships (if applicable), and implementation and management of the program. Of course, you'll need far less information for a relatively simple supplemental program than for a complex total program.

Identify Target Audiences

As you develop your package, you should also consider your different target audiences.* Look first at your own operating program. How many pupils are now covered? Which staffing positions are essential to program operation? Which are peripheral yet important to assure smooth operating conditions? Take a minute to check on the following list those positions you consider essential or peripheral noting the number of people needed to serve your present student load. You will want to list functions appropriate to your project.

Exhibit 1

Program Participation Worksheet

Number of Students:			
Function	Extent of Program Involvement		Total No. of Persons Required
	Essential	Peripheral	
Project Director			
Classroom teachers			
Paraprofessionals			
Resource specialists (Specify)			
Evaluation specialists			
Volunteers			
Parents			
Central District staff			
Other (Specify)			

The preceding list gives an idea of the people in another district or school who will need information on the operations of your program if they are to implement it. Take a few more minutes to go back over the list and circle those you feel would be involved in the decision to actually adopt your program. Add others you feel would also be involved (for example, the adopting district's school board). Each individual you've checked will undoubtedly play a somewhat different role in the decision process. The school board, for example, is unlikely to review critically the curriculum materials; instead, it will

* See "Market Segmentation" in Reference section, IV-18-19.

depend on a district curriculum coordinator or district teachers to review them. Similarly, a parent committee may review your program to insure that it meets the needs of district students, but would probably be less concerned over time and cost involved in ordering and organizing any needed materials. Adoption, thus, is a decision involving many people over a lengthy time period, from the point when the first individual learns about your program through the point where the district finally decides to continue use of your program after the tryout stage. One or two individuals may actually make the "go/no-go" decision, but many others will probably be involved during the process. Realizing that there will be a chain of events leading to a decision, you may want to target certain materials to specific individuals.

Other Groups in the Diffusion Team

The diffusion process is a team process involving a number of individuals in varying roles over time. Your project staff and those who will be participating in the diffusion process form one group. Adopter teams form other groups. There are also many existing diffusion channels with which you may wish to establish relationships. For example, there are intermediate service agencies in many states, commercial publishers, university-based training teams, and the National Diffusion Network -- to mention only a few. They, in turn, form another type of group you may work with. Each of these groups must be considered as you prepare your packaged materials in relationship to your diffusion plan. In addition, other educational agencies interested in learning about your program may be involved. For example, state Title I coordinators share information about exemplary programs with local Title I schools.

You may want to develop specialized materials for some of these groups and/or broaden your proposed packaging scope to be sure you're including materials suitable for these linkage agents. If you expect others to present information about your program, your prepared materials must provide sufficient information for them. If non-project personnel are to conduct training, your directions must be clear and complete enough for them.

ANALYZING YOUR PACKAGE

What are the Key Elements of Your Program?

When you prepare any materials as part of your package, whether of an introductory nature or designed to instruct the user on managing the program in day-to-day detail, it is important to isolate and highlight key elements. This task may be the hardest you'll face -- it's quite difficult to look at something you've created and pick out the truly important pieces. In Section II you'll find an extensive discussion of how to use an outside analyst/writer in the packaging process. Such a person can provide the objectivity needed to identify exactly what in your program probably causes the learner outcomes you can document. It is these key elements you want to communicate through your package and/or the personal interactions you have with interested adopters. These are the elements that, when you see them present at another site, enable you to assert that the new site did indeed adopt your program.

Many elements which you identify as critical will also be evident in other exemplary programs, but you are now trying to identify and communicate the special mix of elements that makes your program unique. Start by listing what you feel are key elements. Some will be major points (such as essential staffing patterns); others will be minor (such as each child having certain color paints). Try this three-step process:

- 1) Ask each of your staff to prepare his/her own list of key elements. Don't try to guide them. Let each person develop his/her list alone without being influenced. Ask each person, "What would need to be in place at another school site for you to decide that our program had indeed been adopted there?"
- 2) When each staff member has completed a list, ask each person to sort the listed items, placing each one under one or more of the following six topics. Create new topical headings as needed. Some key elements may fall under several topics, but most likely, the way you would then treat these seeming overlaps would be to tailor the text to specific situations.

- Project Goals/Objectives
- Program Management
- Classroom/Course Activities
- School/Community Relationships
- Training Procedures/Materials
- Evaluation/Monitoring Procedures

- 3) Now, compare lists and develop a master list. Star those elements several people consider key, but don't discard the others. As you start to prepare the written and/or audiovisual materials for your package, use this key elements list as a guide, recognizing that it will be refined and altered as your work progresses.

Presenting Your Program

Packaging is still a developing technology but a number of hints gleaned from others' experiences may help you to avoid some pitfalls they encountered.

- Choose examples for their broadest applicability. If you're providing only a framework and selected lesson plans as models, try to select lesson plans that are likely to be useful to any teacher/learner of any ability level, or enough samples to cover a range of abilities. If the field is math, perhaps offer one example each in multiplication, division, fractions, etc., instead of six addition lessons. Offer choices in materials selection. One Experience-Based Career Education program provides adopters with sample curriculum guides in commerce, communications and media, life science, physical science, and social science; each of these fields is likely to have broad appeal to high school students anywhere in the nation.
- Note and document any beneficial outcomes not originally expected in line with basic project objectives. The school board of an adopting district may be impressed by academic improvement; but its enthusiasm may be enhanced if inservice staff training can be offered as an "unplanned" outcome. Indirect measures of success can also help assure spread of a program from a trial site to other sites in the same district.
- Be alert to major national trends. In 1976 the nation generally seemed to want to "get back to basics" in education, so a project emphasizing "basics" would have appealed then to many districts. But, be careful -- almost every bandwagon phase leads to another later phase where the same "new _____" becomes outdated and falls into disrepute. It's possible, however, to emphasize different aspects of the same program so that it will appeal to different audiences.
- Avoid unnecessary controversial issues. Many people tend to become upset when school programs seem to be branching into domains once thought to be the sole province of the home or the church. No one can be totally neutral, but always try for balance if your project seems likely to stimulate controversy in a cautious community.

- Think of the potential users of your package as active, autonomous educators. Remember that they have their own special interests, preconceptions, and resource systems. They are unlikely to be able to fathom references to "McBryde School" or "Allied Contractors" or "the green library wall." So, always try to start where they are, not where you were.
- Indicate if your project has been validated by a state education agency, an external reviewer, a Federal review panel, or some other prestigious source in order to establish credibility for any claims you are making. Legitimacy, in this context, implies that the outcomes did not occur by chance and that valid and reliable data are available for impartial consideration by anyone wishing to examine them. If you used a research and development (R&D) process* in readying your project for statewide and/or national diffusion, don't hide that information. Don't overdo the presentation of evaluation data either; not every practicing educator wants to study pages of statistics to find out what you've accomplished with learners. Supply these data, on request, separate from your adopter package.
- Emphasize what's essential and common. Just as you don't want to overpublicize the local supervisory structure, you do want to produce packaged elements that will fit comfortably into almost any school district. If the project site was air-conditioned, is that information critical to adopter installation? Even if all project teachers had master's degrees, isn't the user more interested in what skills they had? If parent station wagons were used for field trips, won't school buses do as well? If a learning episode (or lesson) uses a balance beam, can one be made out of locally available materials? In short, which elements of your project identified as critical will be readily available in most adopting districts?
- Attend to legitimation. "Legitimation" implies that the top echelons of school administration (including members of the school board) recognize the validity of the packaged program, understand its significance for the district, and genuinely want it to be successfully and completely implemented locally. Most importantly, the school leadership must understand what's happening and sufficiently desire the promised outcomes to tolerate temporary inconvenience. (One technique to achieve this goal is to include administrators in all training activities and keep them aware of the program's progress; also, be sure that all the adopters understand why administrators are so fully involved.)

* The R&D process commonly begins with a literature search, followed by a prototype development, refinement, product development, field testing, revision, operational testing, and evaluation.

- Attend also to ownership. "Ownership" implies that the staff directly involved in the teaching/learning process, as well as their immediate superiors, had an active role in the decision to adopt/adapt and to reshape the externally-developed program to fit local needs. Clearly explain the rationale behind your proposed activities so that adopters can assess these steps in relation to their own circumstances. Developing ownership entails taking something not readily understood and making it understandable in light of one's own reality.
- Convey the idea of "quality." Quality is an elusive concept. Well-executed training, smoothly-run workshops, informative "take-home" handouts, thoughtful attention to public relations -- all these and other attributes contribute to a sense of the high quality of your program as it is viewed by potential adopters.
- Anticipate adopter questions. You may want to experiment with the UCLA Teacher Education Laboratory's "Instruction Guide for Selecting Curriculum and Instructional Materials" by M. Frances Klein and George D. Thayer. In the Reference section you'll find two assessment forms (pp. IV-48-52) that you might adapt for critical review of some of the materials you're developing as part of your total diffusion package.
- Help potential adopters to anticipate problems. Every project has problems, whether in personnel relations, in staff selection, or simply with problems of space and materials. Identify the principal problems you've faced, discuss them frankly, and present solutions you've worked out. Also suggest to potential adopters how they can save themselves time and frustration by including problem-solving and problem-anticipation sessions in their inservice activities.

PACKAGE CONTENTS

What Does a Package Contain?

The contents of a package will depend on the intended purpose as well as on the structure of your particular program. Packages developed to date have included some or all of the following. Some projects have packaged the following as separate pieces; others have addressed some as separate chapters in one volume.

Print (booklets, brochures, manuals, etc.)

Introductory Brochure or Booklet -- Explains basic goals and structure of the program; sometimes includes cost information.

Program Abstract

Sometimes covered in the introductory brochure, but often produced separately as an inexpensive and easily reproducible handout.

Inventory/ List/Order Form

Outlines materials and services available from developer staff, with costs.

Project Management Manual

Covers organization and operation of the program and may include budget sheets and key calendar dates.

Classroom Manual

Covers program operation and instructional strategies.

Learner Activities

Provides learning activities and/or how to prepare them.

Materials/Equipment Catalog

Specifies what materials are used in the program and where they may be secured.

Training Manual

Explains training goals and format of required training.

Evaluation Guide

Specifies evaluation procedure alternatives.

Specialist Manuals

Specifies roles and responsibilities for other staff on the project, such as counselors, volunteers, paraprofessionals.

Parent/Community Guide

Outlines parent involvement program, with guidance to insure active participation.

Audiovisual (slides, filmstrips, film, videotape, audiotape)

Sometimes used to stimulate awareness or to assist sites in securing adoptions.

Training Materials

May describe or demonstrate specialized skills, techniques, etc.

Program Operation

Directed at providing more intensive information on program operations for adopting sites.

The Container

The shipping/mailling carton for the above materials.

This brief outline is intended to give a clearer idea of what a package may contain. This information -- combined with decisions about how your package fits into your diffusion plan, what purposes your package serves, and for whom your package is intended -- leads to the next major question.

Where Can You Find Examples or Help?

Many well-planned packages can serve as useful models for your own efforts. Good examples of packaging are the Project Information Packages (PIPs) designed to move interested districts through awareness, adoption, and implementation of well-proven curricular programs. Each PIP follows a parallel format. Each PIP has gone through a rigorous field test and has been revised on the basis of comments and data collected from school

districts that used it to set up their own program. The PIPs are now available for wide-spread use; each state education agency has a set you can examine.*

Studying the best of previous efforts pays off for you by saving time, averting mistakes of omission, anticipating difficulties, and providing guidance. But be cautious: the packaging ideas that worked for another project may not be entirely appropriate for your program or for your budget. State Facilitator projects (see listing in Educational Programs That Work**) keep an array of successful packaged programs readily available. Looking through some of these may give you ideas you might otherwise have overlooked. A nearby intermediate or regional service agency is also likely to have examples of packaged exemplary programs. Commercial educational packages may also provide ideas you can adapt.

Some of these packages have proved successful in stimulating adoptions and assisting with training. Some probably have come close to providing sufficient information to support an adoption without consultant assistance. Studying the efforts of others who succeeded as well as those who have not will prove invaluable in guiding your own packaging efforts. Talk to the developers of these packages and find out what they consider the strengths and weaknesses; try also to talk to others who have used a package and can tell you what they found lacking.

In addition to reviewing the packages, don't hesitate to contact the producers of these packages. Developer/Demonstrators,*** funded in previous years as part of the National Diffusion Network, may be able to provide you with helpful information. From their contacts with adopting districts, they will have first-hand information on the kinds of information adopters need. They can also suggest where they feel their own materials are strong and where they are weak. Consult Educational Programs That Work for a listing

* Contact the Dissemination Unit, Bureau of Elementary & Secondary Education, U.S. Office of Education, FOB 6, Room 2031, 400 Maryland Ave., S.W., Washington, D.C. to learn where sets are available in your state.

** Contact your state ESEA Title I or Title IV Coordinator or secure a copy for \$4.95 (prepaid) from Far West Laboratory, Order Department, 1855 Folsom St., San Francisco, CA. 94103.

*** Projects approved by the Joint Dissemination Review Panel and funded to assist other districts in adopting their programs.

of these projects.* Read the brief descriptions to locate projects that have characteristics similar to yours and that have faced, or may be facing, similar packaging challenges. In addition, a State Facilitator, besides having samples of packages you can examine, may also be able to offer practical tips.

What Information Should You Package?

The information you choose to include will depend on the purposes you expect your package to accomplish, the individuals who will use the package, the characteristics of your own program, and your staff's "ability" (time, funds, expertise) to produce this package. Whatever is prepared must be prepared from the point of view of the user, not from the point of view of your staff. Try to build in as much flexibility as possible, knowing that all users will not approach your package from the same point of view. As you work with different adopters, you'll find variations in their plans for adopting your program. Some will want to set up their program to match yours as closely as possible. Others will want to modify your program to meet what they consider special characteristics of their situation.

Plan ahead for the level(s) of use you hope will occur at an adopting site. You can structure the information you provide accordingly. Once you've analyzed the essential features of your program and explained to adopters why each element is essential, you must still recognize the pervasive need for local "ownership" by the adopting site's personnel. They must be allowed as much flexibility as possible in reshaping "your" program so that it truly becomes "their" program.

In general, you should aim to develop first the most important components rather than trying for superficial coverage of everything you might possibly think of. A packaged program should have at least a sound management system and some sort of classroom or course guide. Then add whatever other components you can adequately prepare in the time available.

An extremely well-developed package should explain fully and clearly the roles and activities of (1) the individual learners, (2) those who will work with learners, (3) those who will manage and coordinate the program, and (4) those who will provide external

* To secure a list of the currently funded Developer/Demonstrator projects, contact the Division of Educational Replication, Bureau of Elementary & Secondary Education, U.S. Office of Education, ROB 3, Room 3616, 400 Maryland Ave., S.W., Washington, D.C. 20202.

technical assistance, where required. Ideally you would provide a what-and-how manual for every key person or role at the adopter site or at least spell-out the responsibilities of each person. It is preferable for each person to have a separate set of materials.

It is usually desirable to suggest or provide a wide range of learning activities so that users can choose among them. Be sure to explain the specific purpose of your various activities and show precisely what they're intended to accomplish. But don't insist that the replicator must do this or that or the other. Suggest ways of accomplishing the goals. For example, explain why lesson plans are needed, and then provide only enough sample lesson plans to permit local adopter-site personnel to generate their own by following suggested models.

The following pages provide a brief outline of the kinds of informational materials that could be provided in a package.* This information has been treated as though you were planning to develop a series of separate manuals to provide guidance for the different personnel who will work in your program at other sites. In fact, you may want to merge several of the manuals into a single volume. Read and work only with those outlines that would be applicable to your program. Within each category, check the areas of essential and secondary information you'll want to prepare for your own program.

* The authors are particularly indebted to the Project Information Packages, prepared for the Office of Education by RMC Research Corporation, from which much of the following material has been taken.

A sample Table of Contents from one packaged program may be found in the Reference section, p. IV-5.

General Audience Materials

Any materials developed should fit into your overall diffusion plan. Others who may work with you to publicize your program can tell you what is needed. Depending on your budget, you may want to prepare several different pieces or use just one for general information purposes. Awareness materials can be used to answer inquiries, to generate interest, to build a constituency, to promote your program as worthy of consideration elsewhere, and to help adopters communicate with district personnel, parents, and community. Among those prepared by some projects are the following:

Abstract -- An interesting one-page handout can be used to highlight the unique strengths and qualities that differentiate your program from others that may seem to be similar. This item can be used separately by your project staff in the overall diffusion effort and can be supplied to replicators as part of your packaged product for distribution by/to adopting site personnel. It can serve also as one means of communicating with school and community. If your project has already been written up in another publication, such as Educational Programs That Work, and if you find no important mistakes, use a reproduction as a simple handout. Some projects (such as ICE in Wisconsin) use this description as one side of their handout, with inventory listed on the reverse side. See Exhibit 2 on the next two pages. (Also see "Fact Sheet Outline" in the Reference section, pp. IV-26-27.)

Awareness Brochure -- Let your creativity work for you, or enlist the help of a skilled designer to insure that you end up with a well designed, clearly organized presentation within budget restrictions. You may also want to enlist the aid of a trained writer to rework your drafted narrative into a soft-sell public relations document. Awareness brochures should attract interest and provide basic facts about your program. If you are planning an extensive diffusion operation, you'll need thousands of these brochures. Check costs of various options (number of pages, layout) before writing your narrative.



PLANNING YOUR PACKAGE

PROJECT: Project I-C-E (Instruction-Curriculum-Environment)

• description

Project I-C-E is a K-12 curriculum and instruction program for environmental education. A conceptual framework provides structure for each grade level and subject area, and totally (K-12) to assist all staff to teach environmentally.

The major goal is to directly or subtly lead students to awareness, recognition, and appreciation of the vital issues, concerns, and factors shaping environmental attitudes and values.

The suggested learning activities are designed to be integrated into regular courses of study by substitution of content or activity, hence not additional instructional matter. This is achieved through a supplementary episode design (mini-lesson) that includes the concept, subject area and topic designation, suggests several alternative student/class activities based on cognitive and affective objectives and necessary skills, and includes suggested reference and instructional resources for the teacher.

The program emphasizes use of the urban and natural community as an extension of and a reinforcement for classroom activities.

Project curriculum guides and model field activity units can be used by random teachers or readily implemented by groups of interested teachers, by building, or a K-12 system without regard for locale or circumstance.

No special equipment or facilities are needed and adoption/adaption by district/school is accomplished in a training program of 3-5 hours at the adoption site.

An Adoption Agreement with a district/school requires:

- Interest in environmental education of staff involved.
- Acquisition of necessary EE materials for staff involved.
- Commitment of teachers in the program to teach a minimum of 3-6 of the 12 concepts in the program.
- Local responsibility to monitor program implementation.
- Evaluation feedback from teachers on "episodes" used via simple checklist rating forms.

• materials used

Project-developed teacher materials include a series of 39 I-C-E Environmental Education Guides for all grade levels and in all major subject areas. In addition there are over 30 supplementary field activity models. Teachers adapt or modify activities according to interest, need, or locale.

A Media Catalog, project brochure, a strategy handbook "To Catch A Falling Star" provide teachers with resource references, background information, and implementation assistance.

Project AV programs are used in training on program approach and the 12 major I-C-E EE concept categories.

• descriptors

Environmental Education
Ecology
Multidisciplinary
Conceptual Organization
Behavioral Objectives
Investigation and problem solving

• target audience

K-12 teachers and students;
all grades and major
subject areas (excluding
foreign language).

• financial requirement

Per pupil adoption cost is
.25-30 cents based on teacher
material, with an average
cost of \$5 per teacher.

Arrangements need to be
made to defray travel and
per diem expenses for
awareness or training
programs.

• program evaluation

An experimental evaluation
design for grades 2, 5, and
8 showed significant student
cognitive gains on the 12
major environmental
concepts. (Evaluation of
grade 11 was inconclusive).
Teachers and parents also
noted that students were
more aware and action
motivated toward various
environmental issues.

• contact

Robert J. Warpinski, Dir.
Project I-C-E
1927 Main Street
Green Bay, Wisconsin 54301

Development Begun: 7/70
USOE JDRP Approval: 5/14/75
JDRP Number: 75-39

ICE LIST/PRICES FOR BASIC PROJECT MATERIALS

A. Complete set of 39 booklets
and the Media Resources Catalog
and Concept Rationale booklet..... \$85.00

C. Individual Items -- Curriculum Guides

Kindergarten, 106 pages.....	3.00
Grade One, 116 pages.....	3.75
Grade Two, 104 pages.....	3.00
Grade Three, 127 pages.....	3.75
Grade Four, 121 pages.....	3.75
Grade Five, 136 pages.....	3.75
Grade Six, 109 pages.....	3.00
Music (Grade K-3), 52 pages.....	1.50
Music (Grade 4-6), 73 pages.....	2.25
Art (Grade K-3), 61 pages.....	1.50
Art (Grade 4-6), 70 pages.....	2.25
Physical Education (Grade K-6), 76 pages.....	2.25
Math (Grade 7), 44 pages.....	1.50
Math (Grade 8), 46 pages.....	1.50
Language Arts (Grade 7 & 8), 76 pages.....	2.25
Social Studies (Grade 7 & 8), 78 pages.....	2.25
Earth Science (Grade 7 or 8), 32 pages.....	1.15
Life Science (Grade 7 or 8), 40 pages.....	1.15
Music (Grade 7-9), 46 pages.....	1.50
Art (Grade 7-9), 88 pages.....	2.25
Physical Education (Grades 7-12), 26 pages.....	.75
Home Economics (Grades 7-12), 126 pages.....	3.75
General Math (Grades 9-12), 88 pages.....	2.25
Mathematics (Grades 9-12), 89 pages.....	2.25
Language Arts (Grades 10-12), 80 pages.....	2.25
Music (Grades 10-12), 24 pages.....	.75
Art (Grades 10-12), 72 pages.....	2.25
Civics, 38 pages.....	1.15
World History, 30 pages.....	1.15
American History, 26 pages.....	.75
Elective Studies, 26 pages.....	.75
Industrial Arts I (Grades 7-12), 103 pages (Woods, Metals, Drafting, Electricity).....	3.00
Industrial Arts II (Grades 9-12), 86 pages (Plastics, Graphic Arts, Power Mechanics).....	2.25
Agriculture, 104 pages.....	3.00
Physical Science, 26 pages.....	.75
Biology, 122 pages.....	3.75
Chemistry, 44 pages.....	1.50
Physics, 42 pages.....	1.50
Business Education, 148 pages.....	3.75
Concept Rationale Booklet.....	.50
Catalog of Media Resources.....	1.50

Training Materials

Implementation Strategy Handbook.....	1.50
Head High in Learning slide/tape, 84 slides on carousel.....	50.00
Man Needs His Environment slide/ tape, 140 slides on carousel.....	70.00
Nature: Field Trip slide/tape, 117 slides on carousel.....	60.00
Journey to a Sylvan Place slide/ tape, 79 slides on carousel.....	50.00

B. Complete set of 33 field
activity models..... \$5.00

Field Activity Models

1. Tips for a Good Field Experience.....	15
2. Checklist of Field Trip Activities.....	10
3. Colors, Shapes, Patterns & Textures in Nature (Grades 1-3).....	10
4. It's Your World (Grades 1-3).....	20
5. Alphabet Observation Hike (Grades 1-3).....	10
6. Land Use-A Simulation Activity (Grades 4-8).....	10
7. Yuru the Guru Studies Ecology (Grade 2-Adult).....	20
8. Nature's Recycling System (Grades 3-6).....	20
9. Ecology Treasure Hunt No. 1 (Grades 4-6).....	15
10. Billboards & Signs (Grades 5-9).....	15
11. Two Reporters Dig Those Crazy Clues (Grades 5-12).....	40
12. Good Evening, Ladies & Gents (Grades 5-12).....	30
13. Here Comes the Judge (Grades 5-12).....	25
14. Come Fly With Me-Any Season (Grades 5-12).....	25
15. He Said What? Well, Here's What I Think (Grades 5-12).....	20
16. Go Solo-Then Shape and Share (Grades 5-12).....	15
17. Forest Management Session (Grades 5-8).....	20
18. A Land Ethic (Grades 7-12).....	20
19. Task Assignments for Urban Environmental Investigations (Grades 10-12 Advanced).....	20
20. Don't Use Traffic Jam on Peanut Butter Sandwiches (Grades 1-6).....	25
21. Who Was Here? (Grades 2-5).....	25
22. Ecology Treasure Hunt No. 2 (Grades 5-8).....	25
23. Discovering Who's Who Among the Evergreen Trees in Wisconsin (Grades 5-7).....	30
24. Be Kind to Your Outdoors (Grades 6-10).....	30
25. Those 'Way Out' Wild Plants- (The Non-Flowering Plants) (Grades 6-10).....	25
26. The Forester at Work (Grades 10-12 Advanced).....	35
27. Is Man's Environment for the Birds? (Grades 4-Adult).....	20
28. Trees in the City (Grades 11-12 Advanced).....	30
29. Wild Flowers in Their Own Habitat (Grades 11-12).....	45
30. Be Prepared to Get Lost (Grades 5-8).....	20
31. Plants & the Soil (Grades 7-12).....	30
32. How Much? (Costs) (Grades 4-6).....	10
33. Nature's Recycling System No. 1 (Grades 3-6).....	15

Short Program Booklet -- Many projects provide a more detailed brochure or small booklet giving richer information about their program for districts seriously considering adoption. The Analysis and Selection Kit (ASK), part of the diffusion materials for the Project Information Packages, includes information on the following:

- Instruction
- Management/Communication
- Estimating Costs
- Organization
- Personnel
- Materials/Equipment
- Facilities
- Getting Started
- Adoption Criteria.

Audiovisual Materials -- Many projects have used audiovisual aids to stimulate interest in their project and/or to assist in the adoption process by showing key operations of their program. Consider seriously whether your program is suitable for audiovisual presentation and whether such a presentation is needed for your diffusion effort. Then consider your budget limitations as well as the skill level of your staff in preparing a first-rate presentation. Preparing effective, high-interest AV materials is very tricky, so tread cautiously. Refer to Section III, pp. III-21-25 for additional guidance and seek advice from others who have prepared such materials.

Specially Targeted Materials

In the brief descriptive sections that follow, some manuals contain similar, if not identical, sections. If you treat each element of your package as a self-contained element, this type of breakdown will be necessary to assure that personnel have available in their own materials all essential information. If you plan instead to develop only one or two manuals, then those central information sections (goals and objectives, project overview, etc.) must be written to fit the perspectives of different readers (project director, aides, evaluator, etc.).

Information for the following manuals is supplied:

Project Management Manual
Classroom Manual
Learner Activities
Materials/Equipment Catalog
Training Manual
Evaluation Guide
Guide for Other Personnel
Parent/Community Guide.

For each manual, information is located under one of six headings (these same headings were suggested on p. I-6 as headings for key element lists being developed):

Project Goals/Objectives
Program Management
Classroom/Course Activities
School/Community Relationships
Training Procedures/Materials
Evaluation/Monitoring Procedures.

Project Management Manual* -- You may need a separate project manager's guide. Even if you can't produce a separate directory, you'll need to provide information on some, if not most, of the following items:

Project Goals/Objectives

Project Overview -- Provide a brief introduction to major aspects of your program. Include: basic philosophy, student characteristics, organizational arrangements, brief history of project development, staffing arrangements and required experience, facilities used, materials/equipment, instructional characteristics, evidence of effectiveness (approximately 2-3 pages).

Overview of Package -- Describe the different pieces in your package, how they should be used; indicate services available from your staff (2-3 pages).

Goals and Objectives -- Describe the program's goals and objectives and explain how they relate to planning and classroom activities.

Project Atmosphere -- Describe the environment of your project that distinguishes it from others. Indicate major operating principles and relationships among teachers, administrators, and resource staff.

* See suggested organization and contents in Reference section, pp. IV-31-33.

Program Management

Management Approach -- Outline role of the project manager and characteristics of the management component of your program. Provide a management calendar showing the sequence of tasks.

Start-up Tasks -- Provide in clear outline form a list of the various tasks involved in starting up your program. Share ideas on how another district can profit from your experience so as to get started more quickly and efficiently than you did. You may know some shortcuts they can follow and/or some stumbling blocks they can avoid. Remember, though, that you'll be guiding others in starting up your current program, not reporting how you started up several years ago.

Selecting Staff -- Specify professional skills and personal qualities and attitudes that have worked successfully in your program. Offer any special guidance you can provide for interviewing and selecting effective staff members.

Use of Paraprofessionals/Volunteers/Community Resources -- Indicate how your project has utilized such persons and the potential roles they can play; outline recruitment techniques, training provided, management, and monitoring.

Staff Training -- Indicate what training is needed for which staff positions. Distinguish between start-up training and ongoing inservice training. Depending on the importance of training in your program, you may choose to prepare a separate training manual. If so, provide here just a quick overview of what is covered in the training sessions, including time involved and equipment/materials required.

Staff Relationships -- Provide clues as to how your staff has developed and solidified its strong team relationships.

Continuing Beyond the First Year -- In this important section, share the experience you've gained in assuring that your program will be continued in your district. Once instruction starts, the project will presumably carry out the same or similar operational tasks on a yearly basis, with "start-up" assignments then being required only for new personnel. Include funding hints, how you've kept visible, staffing changes that may occur, planning for retraining, etc.

Budgeting -- Clearly outline costs involved in operating your program, noting optional arrangements. Show ongoing costs as separate from start-up costs. If possible, distinguish between personnel costs and other operational costs. Note minimum versus maximum costs. It is not necessary to include exact salary costs since costs will vary across districts, but indicate the types and numbers of personnel required in different positions. Costs you may want to split out include: staff, facilities, equipment, materials, computer time, transportation costs, consultant services, public relations. See pp. IV-34-43 in the Reference section for budget worksheets used in the Project Information Packages and for information on cost per student.*

Materials/Equipment/Supplies/Tests -- List required and optional materials to be used, indicating when they are used in the program and how much lead time you've found necessary for placing orders. You may want to provide a separate listing of materials needed if your program relies heavily on a wide variety of materials. If you use materials not widely known, list

* See "Cost per Student" in Reference section, p. IV-43.

distributors and their addresses. Provide clues as to which materials are consumable. If you have developed your own materials and tests, include master sheets from which adopter districts can make their own copies. Be sure not to reproduce any copyrighted materials without permission from the author. (See Section III, pp. III-25-26.)

Facilities -- Indicate recommended facilities, suggesting options where you can.

Task Checklists -- Provide an overall planning guide for the director by indicating major tasks over the calendar year. Share your experience with adopters. Spell out all the steps you know must be taken by the person who is responsible for installation and coordination of the new project at the adopting site. You may want to develop a chart similar to the following matrix:

Exhibit 3

Task Schedule Worksheet

Task	1977				
	Jun	Jul	Aug	Sep	Oct
Selecting Students		Compile scores; establish criteria		Set schedules	Mediate conflicts
Recruiting Teachers	Recruit	Interview			Recruit aides
Training	Arrange workshop consultants	Plan start-up workshop	Conduct workshop		Provide inservice training

Classroom/Course Activities

Selecting and Scheduling Students -- Indicate steps involved in identifying students for the program (if appropriate) and how scheduling is handled.

Instruction -- Provide detailed information on program philosophy, instructional environment, and procedures. If a particular sequence of activities is followed, provide an example of a typical day's schedule. Outline the director's role in getting instruction started and in monitoring progress. Provide clues as to how a project director can check to see that all is going well.

School/Community Relationships

School/Community Relationships -- Outline the director's role in developing and maintaining good relationships; give particulars of your "success formula."

Training Procedures/Materials

Training -- Outline the director's role in relationship to planned activities.

Evaluation/Monitoring Procedures

Evaluation -- Specify required responsibilities.

Classroom Manual

Project Goals/Objectives

Project Overview -- Provide a brief overview to major aspects of your program. Include: basic philosophy, goals and objectives, student characteristics, organizational arrangements, brief history of project development, staffing arrangements and required experience, facilities used, materials/equipment, instructional characteristics, evidence of effectiveness (approximately 1-2 pages).

Project Atmosphere -- Describe the environment of your project that distinguishes it from others. Indicate major operating principles and relationships among teachers, administrators, and resource staff.

Program Management

Materials/Equipment -- Outline materials normally used,* indicating the part teacher-made articles will paly. Indicate size of teacher-controlled budgets.

Classroom/Course Activities

Selecting and Scheduling Students -- Outline the duties of teachers, suggesting amount of time required and when tasks should be completed (show sample schedules, if applicable).

Diagnosing Student Needs -- Specify diagnostic tests and techniques used and how to interpret data.

Instructional Program -- Tell what's expected of teachers during the program, how results of student diagnoses are matched to suitable materials and programs, how instruction is monitored.

Classroom Management -- Give details on organization and management of the classroom and include sample lesson plans.

School/Community Relationships

Communication With School and Community -- Specify teacher roles in ensuring strong, positive relationships with community and non-project personnel in the school and district.

* For a suggested format to display levels of materials, see Reference section, pp. IV-44-45.

Training Procedures/Materials

Training -- Clarify types of activities and skills to be covered in training programs that adopters will conduct themselves.

Evaluation/Monitoring Procedures

Evaluation -- Clarify the role teachers play in project evaluation efforts, noting classroom time required as well as any time for organizing, presenting, or coding data.

Learner Activities -- For each activity or group of activities you'll probably want to supply information on the areas cited here. Commercially prepared curriculum packages serve as excellent guides for "what to do and not to do."

Classroom/Course Activities

Goals and Objectives -- Show what the activity(s) intends to accomplish.

Target Audience -- Specify learners for whom materials are primarily intended; also mention other groups who may be able to use the materials with some modification.

Intended Use -- Provide information on suggested format or mode in which the activity should be used (small group, individual study, game, etc.).

Directions for Use -- Include specific directions for completion of the activity (may include instructions for a teacher or paraprofessional as well as for a learner).

Materials -- If the activity involves use of specific materials not readily available in a classroom, include these or give directions for purchasing or making them.

Evaluation Activities -- Where appropriate, include any checkoff or evaluation activities that verify the learner's accomplishment of stated objectives.

Follow-up Activities -- Include optional replacement or follow-up activities (provide the same information as for core packaged activities).

Materials/Equipment Catalog

Program Management

Materials/Equipment -- Since curriculum materials can often be obtained from a range of classroom/laboratory options already available within the adopting district or can be purchased/rented/developed without external help, an easy-to-follow guide to materials selection and use can save time and money for both you and potential adopters. Accurate and complete information is very helpful to users. Indicate where in the program they are used and any special uses; include comments from teachers regarding their use. It's also wise to suggest means of obtaining suitable substitutes or acceptable replacement parts. If teacher-made materials are reproducible or if you can include plans for constructing special equipment/toys/games, include them here along with directions for their use. You may want to separate materials

by grade level or by subject matter and indicate those you consider core and those deemed supplemental. Spelling out in detail all items needed for complex learning products, with multiple components, can avert unnecessary crises during implementation. Be sure to give complete titles, publication dates, order numbers, and so on.

Training Manual -- Depending on the type of package you're planning to prepare, you may have in mind one or more different types of training manuals. One would be used at the project site for conducting pre- and inservice training. Another type would be a manual developed for use in training others to become trainers for your program. In either case, you will want to include some of the following information:

Project Goals/Objectives

Project Overview -- Provide a brief introduction of major aspects of your program. Include: basic philosophy, goals and objectives, student characteristics, organizational arrangements, staff arrangements and required experience, diagnosing student needs, instructional characteristics.

Training Procedure/Materials

Training Goals -- Specify clearly the goals and objectives for the planned training. This will allow users to assess which elements of your program they, in turn, will offer and which they may feel will need to be supplemented, given their particular situation.

Proposed Training Plan -- Outline sequence and content of training, specify activities, provide clear directions, indicate format for all sessions (lecture, small group, individual study, etc.), specify time required. Provide guidance in planning start-up training as well as follow-up training throughout the year. Try to make the training aspects of your program appear as trouble-free, as painless, and as inexpensive as possible for the adopting district. Since substitute pay can seem to be a barrier in an already strained fiscal situation, be sure you're honest about costs and all other requirements.

Assessment of Training Needed -- Set forth procedures for identifying training needs during the year and planning for their development.

Assessment Instruments -- Provide instruments to be used (as long as not copyrighted) and guidance in interpreting results; show how to replan sessions as necessary.

Materials Required -- Indicate how any games, films, etc. may be ordered, prices, and lead time required to order; include training handouts and lessons that can be duplicated by users.

Use of Outside Resources -- Explain how you have used other personnel in your district or from outside during the training.

Use of Available Training Resources -- If your program has used nearby college, university, or other training agents, mention how you identified such sources and what arrangements can be made. Don't go into extensive detail since out-of-state adopters probably cannot use those exact sources; however, the relationships you established with those resource people may also be useful information.

Audiovisual Materials -- Depending on the type of training program you use, you may want to produce or reproduce audiovisual materials. These can be very effective aids, decreasing the burden on training staff, if they are of good technical quality and contain how-to information. Evaluate your own skills or those of readily available experts and your budget before venturing into this area.

Evaluation Guide*

Project Goals/Objectives

Project Overview -- Provide a brief introduction of major aspects of your program. Include: basic philosophy, goals and objectives, student characteristics, organizational arrangements, staff arrangements and required experience, diagnosing student needs, instructional characteristics.

Evaluation/Monitoring Procedures

Purposes -- Discuss the purposes evaluation can serve, indicating minimum versus maximum suggested.

Roles -- Explain the various responsibilities of those involved in collecting and analyzing data: project director, school administrative staff (if different from director), teachers, paraprofessionals, and evaluation specialists.

Formative Evaluation -- This type of data provides indications of how well the program is functioning and serves as a guide for trouble shooting. Specify the types of information you have already collected and used (checklists, observation guides, etc.).

Summative Evaluation -- Assessing outcomes may entail use of a number of different measurements. Indicate the tests and other inventories used in your program, noting any special uses made by your staff. Outline how data are to be analyzed and presented. If you use a computer system, you'll want to include information specific to its operation.

Evaluation Schedule -- Specify key dates in the calendar year for planning for, collecting, and analyzing evaluation data.

Guide for Other Personnel -- If your project uses staff members besides classroom teachers, you may want to create separate manuals outlining their roles and responsibilities or you may want to prepare brief sections detailing tasks specific to those roles. For example, if the project director is not the principal of the school in which your program operates, then you may want to explain the role the principal plays and any required responsibilities. Other staff might include a curriculum consultant, a resource specialist, health or psychiatric staff persons, counselors, paraprofessionals, etc. Refer to the outlines for the Project Management Classroom Manuals for subject areas to be covered.

* See "Evaluation" in Reference section, pp. IV-46-59.

Parent/Community Guide -- If community involvement is a particularly important component of your program, you may want to develop a separate manual or section devoted to this topic rather than including it in a management directory and/or teacher guide. Explain your program's philosophy of community involvement and the different means through which community people have been involved.

Other Materials

Experienced project staff have included as part of their packaging effort some or all of the following materials:

Inventory Lists -- Prepare these to enclose in your package, plus a separate detailed list of the materials and services you provide. Indicate the different cost options (single/bulk orders), those materials available at no cost, and various services your staff can provide and the costs involved. Also, indicate times when your project can be visited and any special arrangements required. If you offer several different awareness and training sessions, you may want to provide a brief synopsis of what is covered in each option.

Index -- A printed component will, of course, need its own index and table of contents. Also, in the management directory (or coordinator manual), you may wish to include an overall program package index. (A sample index page of this type may be found in the Reference section, pp. IV-73-74.) If you decide on this type of indexing, you should number or letter each component (I, II, III, or A, B, C) so that you can indicate page references in the various booklets (e.g., I-7, II-3, or A-8, B-4) for ready reference.

Adoption Forms and Agreements -- Most projects in the National Diffusion Network have developed forms to guide the adoption process. These may take several forms but usually specify what the exemplary project staff will provide and what the adopting district agrees to do. See Reference section, pp. IV-28-30, and Forms and Formalities.*

The Container -- See Section III, pp. III-11-12, for information on this key element of your package.

* Available at no charge, while supplies last, from the Nebraska-Iowa State Facilitator Project, 2407 Chandler Road, Bellevue, NE 68005.

Organizing Your Package

Try now to prepare an organizational outline for your planned package. Make a master list that identifies the different components or manuals you plan and the topics (outlined on the preceding pages) you want to address. Check to see how many topics you now have for each separate manual and estimate the length of narrative needed. Add other headings as needed and fill in the intended audience for each component or manual. The following example may help you:

Exhibit 4

Package Planning Outline Worksheet

Package Component	Topics To Be Covered	Est. No. Pages	Recipients
PROJECT MANAGEMENT MANUAL	Goals & Objectives Management Budget Staffing Planning Materials required Total	20	Project Director
CLASSROOM MANUAL	Day-to-day planning and management Curriculum materials Diagnosing student needs Total	20	Teachers Resource personnel
TRAINING MANUAL	Project goals Preservice training Inservice training Follow-up activities Materials Total	25	Project Director Lead teacher

As a third step, take the key elements list you and your staff developed (see pp. I-7). Designate in which manual(s) and under which heading each key element should be discussed. You should now have a working outline from which to plan the various components of your package. Think in terms of the separate components you feel are needed to describe your program accurately. Rework your outline so that each narrative section is placed under the appropriate component (teacher manual, project management, etc.). As you actually draft the different narrative sections, you'll undoubtedly revise your outline many times, adding and deleting materials as well as reorganizing. However, this

first outline will give you a starting point. Some sections, such as project environment, may be integral to several different manuals but the amount of detail required may vary.

In Summary

1. Identify the purpose(s) your package will serve.
2. Identify the target audiences for your packaged materials.
3. Identify key elements of your program.
4. Review the suggested package components and contents (pp. I-14-25). and identify those to be included in your package.
5. Organize your package:
 - a) Combine information collected in #2 and #4 above.
 - b) Estimate length of narrative required.
 - c) Take core elements identified in #3 and assign treatment to the appropriate heading(s) within manuals identified.

Section II provides guidance in planning the actual preparation of your print and/or audiovisual materials. Before proceeding, however, review the following brief section on writing style; it offers pointers gained from the experience of other packagers.

Writing Style

The following section includes a detailed discussion (pp. II-2-4) on selecting an outside analyst and/or writer to work with you in preparing your package. Depending on your budget and your own staff's writing skills you may or may not chose to enlist outside assistance. However, experience has shown that hiring someone to edit your final materials is usually a sensible budget expenditure. This individual should be able to weed out excess verbiage and enliven writing style to assure a more readable package. If, however, you intend to prepare your own materials from start to finish, have your own staff cross-check everything that's written. Be alert to stilted phraseology, overly repetitious phrases, and convoluted sentences. Aim for clear, concise sentences that communicate and are interesting to readers. Organize for clarity, using tables of contents and indexes to lead the user quickly to pertinent information. Other cautionary notes include:

- Watch your language! Many words/phrases carry affective connotations. "Accountability" has become anathema to teacher organizations. "Behavioral objectives" was once misinterpreted to mean "behavior modification." External reviewers should be helpful in alerting you to possible dangers of this type.

- If you're creating materials for use by pre-professionals, pay close attention to their needs and interests. Do they normally use words like "diagnostic" or "cognitive?" Do they speak "research" lingo? If you're writing for administrators, but you've never served in an administrative capacity yourself, do a little probing to find out how some administrators would view your project. The more varied the audiences, the more complex your packaging challenge will be.
- Avoid cultural, ethnic, or sex bias. The Task Force for Evaluation of Instructional Materials (P.O. Box 4003, Stanford, CA. 94305) published A Guide To Textbook Evaluation in 1974.* In this guide the Task Force included the following warnings that may keep you alert to some possible booby traps related to bias:
 - Do materials accurately portray the contributions of both men and women, of varied ethnic and religious groups, of all socioeconomic levels, etc.?
 - Have you avoided stereotypes?
 - Have you provided for diversity?
 - Have you assured fairness throughout?
- It's not too late to change the name of your product if outsiders can't immediately identify your focus. Project BFTSPLK isn't just unpronounceable -- it's lacking in "sales appeal." It doesn't tell what a project would do for those adopting it. Better names might include:

Project Adventure
Home Start
Urban Arts
Talents Unlimited
Saturday School
Media Now

If you decide to change your project's name or product's title, try for "labels" that convey to others the essence of your program. Both educators and news media representatives will be better able to grasp the focus of your particular project if they can sense quickly that its essential feature has meaning to them -- e.g., math drill, parent tutoring, reading laboratory.

- At all stages of production you should be concerned with readability. For example, in your early preparation of learner materials, you must always consider reading levels. When in doubt, use a readability formula** to determine if you're on target for the learners who will be using your materials.

* See Reference section, pp. IV-75-79.

** See Reference section, pp. IV-80-82, for a discussion of some readability formulas.

- Don't overemphasize context variables too early. A reading program for underachievers validated with a poor, inner-city population may or may not be relevant to decision-makers in Native American reservation schools with quite different underachievers in reading. Not much is yet known about transportability/transferability from sites that differ demographically (e.g., regionality, culture, etc.). Programs validated with one ethnic population can be adapted to the needs of another ethnic group, if the program package and the staff training make allowances for cultural and racial differences. However, a program specifically geared to rural needs may run into difficulties if proposed for big-city urban adoption. Target your package with such factors in mind.
- Handle local acknowledgments prudently. Try to find ways to give contributors and district administrative staff appropriate mention (perhaps inside the front or back covers) without overdoing your expressions of gratitude and without consuming valuable space on front covers or title pages. You may have to walk a tightrope between user needs/interests and political expediency in your state and district.
- Be crisp and concise. The package you put together is not a place to flaunt your knowledge. Avoid educational jargon.
- All your materials intended for adults must also be clear and readable. Present your product in its simplest possible form, but don't talk down to adopters, users, and trainees. You might invite a newspaper writer to review all materials to eliminate "educational" language.



STAFFING BUDGETING AND SCHEDULING

STAFFING

Four separate, but intertwined, sets of tasks make up this management challenge. Narrowing the selection of the packaged components has already been discussed (pp. 1-9-27).

The three other challenges are:

- Selecting and utilizing available personnel
- Budgeting available funds wisely
- Planning and adhering to time schedules

This section points out some decisions to be made and demonstrates how these tasks interact. Obviously, you can't make decisions in one area without considering the others. For example, you'd like to hire person "x" to complete final editing of your typescript. However, that person won't be available at the time your materials will be ready for editing. Can you then adjust your time schedule and still enlist the assistance of that person? If you delay production of your package, what will be the effect on your overall diffusion effort? Would it be possible to speed up the writing of the narrative sections? But how would that affect completion of other tasks? Such ad hoc decision-making is representative of the challenges you'll face as you strive to produce your packaged components. You'll probably find yourself doing a juggling act; and you may, in some cases, need to "cut corners."

In the previous section, you drafted a rough outline of the narrative content of your package, noting different components you might have to prepare. You also identified audiences for whom you intend to prepare information. Keep these outlines handy for reference as you start to assess your personnel needs, work with your budget, and plan a time chart. You'll also want to keep in mind which of the three packaging options your situation most closely matches:

- Your project is to be funded for a limited time to package your program for diffusion; nearly all your time, staff, and funding resources are to be devoted to preparing your package (including materials for training key personnel at adopter sites).
- Your project is to be funded to carry out packaging as one task among many (awareness conferences, demonstrations, travel, training, package testing and production, etc.).
- Your project has no external funding to develop materials beyond the point at which they now exist. There is, however, interest and support in your district for packaging your program.

Your overall situation and the extent of your planned packaging effort will affect how you manage development of your package. As in preceding sections, this discussion assumes that you may be preparing a rather complete and comprehensive package and that this effort is a major focus of your present work. As before, read selectively if you're planning a less comprehensive package.

Selecting and Utilizing Available Personnel

The Packaging Manager

The first important decision, however, is to select one key project person to take full responsibility for the packaging effort. This person should have management and organizational skills and be thoroughly familiar with your program. If the packaging effort will be extensive, this leadership assignment should be that individual's major responsibility; don't let the role become fragmented among several conflicting tasks. If this person is not already the project director, then it is vital that these two people have a comfortable working relationship, with open communication paths. This section, as well as the rest of this manual, is written primarily for the individual who will guide the packaging effort to successful completion.

The Project Analyzer

The second critical packaging role is that of analyzing the project and deciding on package content. Experience in development of Project Information Packages suggests that "insiders" (i.e., project staff) have sometimes tended to describe their own project inaccurately. They often take many important project features for granted and thus fail to mention them. In addition, "inside" personnel with varied viewpoints may make conflicting statements about the project. An impartial outsider can often sort out viewpoints and identify key ones.

Depending on your budget and your staff expertise, you may want to assign the major analysis role to an outsider (as was the case with the Project Information Packages). If your budget is limited, however, bringing in an outsider for a day or two to help develop an outline and pinpoint critical elements for inclusion and later to review the first draft may be the best compromise available to you. The challenge would be for an analyzer to discover the key elements that make your program work with learners and to identify those features that clearly differentiate your program from others that appear similar.

The analyzer should be someone who:

- is sufficiently removed from your project to view it from the adopter's vantage point;
- understands your project's content/subject area and is familiar with similar projects developed elsewhere;
- can help explain to others what causes learners to achieve significantly better because of your efforts;
- can win and hold the full confidence of project staff (it is important to encourage and foster close and frequent interaction between the outsider and project staff);
- can use good questioning techniques to elicit information from a variety of people;
- is conversant with Federal and state regulations related to such programs and their funding sources. (This would be especially significant in the case of a program developed originally with ESEA Title I, bilingual, or handicapped funds, as well as others.)

Finding someone with these qualifications is not easy; you may need to drop some "ideal" criteria.

One source for recruits may be a nearby university's graduate departments -- psychology, education, sociology, journalism, etc. However, costs may sometimes be high and skills not precisely what you need. If resources permit, contract for expert help from an educational research and development agency or a private consulting firm.

A talented analyzer will first review the overall project to see how it fits together. The primary task is to see it as a whole before the ideas are committed to a draft typescript. The analyzer must try to set aside his/her own prejudices; the package must reflect only the principles of the validated project.

The external analyzer must be free to go anywhere in your district, asking questions of everyone involved and collecting documents. With or without careful historical documentation, the analyzer will need to interact heavily with project staff. When interviewing staff, the analyzer should aim to elicit what's being done and by whom. Then, he/she can look for commonalities among responses obtained from teachers, learners, and coordinators. For example, when the project director enters a classroom, some events occur; the analyzer must ask the teacher and the director what the latter does in that situation, since each may have a different perception of that key event. Asking insightful questions is vital; mere recording isn't enough. Probing questions can determine the

key steps and the timing of events (with concrete procedural descriptions) required to produce desired outcomes. But even as you recommend various methods of reaching outcomes, adaptations can be anticipated if not actually encouraged.

Remember, too, when hiring an analyzer, to negotiate an agreement in writing that (1) sets up a firm timeline, (2) calls for step-by-step review of work in progress, and (3) allows you to terminate the assignment if the work proves unsatisfactory. You may want to begin by hiring someone for a trial period and then contract for a longer period if the early work progresses smoothly.

Identifying Other Staff

Three types of personnel talent may be needed to prepare your package: those who can plan and write the narrative; those who can review and react to draft versions; and those who can actually produce your package.

There are three general talent pools from which you can draw assistance. First, and most important, are your project staff members; second, others within your school and/or district who might help out; and third, those you can recruit from "outside."

Project Staff

The next decisions mandate a critical look at present project staff. Draw up another worksheet listing the name of everyone (including yourself) who works directly with the project in any major way. Now fill in the columns with the following information.

- First, what percentage of time might each person be able to devote to the packaging effort during the projected production period?
- Second, refer to your rough content outline and indicate with which aspects of the program each person is most familiar.
- Third, in which phases do you expect each person to participate (e.g., planning/preparing narrative; reviewing drafted materials; production; distribution)? What specific tasks (if any) do you see each person carrying out in your packaging effort (e.g., writer; editor; organizer; researcher of information; typist; proofreader; graphic artist; collater; inventory set-up/maintenance; order processor; etc.)? You may even want to indicate via your own coding system whether each is "able," "adequate," or "needs help" in the roles you are assigning.

The following sample worksheet displays how such information can be organized.

School/District Resources

With that worksheet sketched out, you're ready to start assessing where you'll need outside help. First, identify the "people" resources in your community and school district. Many possess "know-how," "know-where," or "know-who." For example:

- a purchasing agent -- lists of reliable printers, lettershops, etc.
- an art teacher -- graphic artist or commercial designers
- your business office -- some experience in pricing educational products
- a vocational teacher -- contacts with local business firms
- business classes -- possible typing service
- duplicating shop -- printing of all/most components

These colleagues may be able to "plug holes" in your production effort. Before assuming, though, that they will be able to cope with some major assignment, be sure they'll have enough time to complete any given task within your time frame.

Exhibit 5

Project Staff Availability Worksheet

Name	Area of Expertise	% of Time to Proj.	Phase/Task Assignment				
			Planning/Preparation	Review	Reproduction	Distribution	Special Tasks
Self	All - especially management	70	X	X	X	X	Supervise operation, provide writer capability
Jan Smith	Teacher supervision	20	X	X			Content writer
Chris Thoms	Classroom management, curriculum materials, instruction	40	X	X			Provide strong writer input
Fran Tedroe	Record keeping	50		X	X	X	Provide content type narrative (adequate), proof-read

Outside Resources

At minimum, you should seek outside help on review of your draft materials to assure that they do indeed communicate what you intend. If you're planning a multi-component package, you should certainly seek help from others. The following pages identify "outside" personnel types and the functions they can perform for you.

Writer/Editor

Depending on your budget and staff expertise, you may want to hire an outsider to do some or all of your writing. If staff will be doing the writing, you may want to hire an editor to give final polish to your materials. The writer may, in fact, be the same person you hire as an analyzer. The same cautions as those for the analyst apply when hiring this person. And it will be even more important that your entire staff feel comfortable with this outsider's personality and understanding of your program. Someone with the following type of background will probably most closely match your needs:

- journal or trade magazine experience rather than authorship of research documents;
- writer of long narrative materials rather than short public relations pieces;
- writer of materials intended for the general public rather than for professional groups;
- actual school classroom teaching experience rather than college teaching;
- writer of nontechnical materials rather than of scientific/technical monographs.

Audiovisual Expert

Unless you have someone on your staff or in your district with professional skill in this field, you'll need to seek assistance on any audiovisual package components. Unfortunately, many projects in the past have failed to avail themselves of professional help and have produced expensive AV components that were not well received by the intended audiences. You'll never satisfy everyone, but a trained professional can do much to insure that your message is communicated concisely and interestingly.

Someone who has produced materials for professional audiences should probably be your first choice. Ask to see samples of actual work to ascertain whether the proposed style complements your needs. Watch for possible deadline conflicts with other competing contracts the AV consultant may already be committed to. Respect his/her professional

judgement but retain rights of approval/disapproval at given stages in the development process.

External Reviewers

Long before you're ready for a full-fledged tryout, you'll need other outsiders to react to your diffusion plans, review draft materials, and critique packaging notions. Choose people in positions similar to those for whom specific materials are targeted. For example, invite other teachers to review your teacher manual and administrators to review project management materials. Choose people who will comment freely and impartially. Try to enlist at least two different people to review each component of your package.

All developed materials should be tried out in a real-world situation and then revised before final production. The revision process may well consume as much time and energy as the development of the prototype. For this reason, common sense and research and development practice both suggest that you should not let any packaged product "harden" too early in the developmental process. Use a draft version to secure feedback from early trial sites and/or external reviewers. Make your revision and do your final editing before you arrange for production of a final typescript.

Field testing can be as simple as asking a few educators to critique your draft materials -- or as complex as an elaborate research-designed, multi-phase series of field trials.* In reality, most project site personnel will be able only to collect comments from a few outsiders or conduct a one-time limited field test at a few selected sites. Ideally, you should personally use your draft package materials with several adoption sites; then revise the package on the basis of your experiences before final production.

No matter what type of external evaluation you select, be sure to allow ample slack in your overall production schedule to incorporate feedback and revision. Merely slapping together the first version of the materials that worked well in your project and was formally validated is not enough. You need to find out pragmatically whether your prior materials can be used effectively and easily by others outside your project -- by people who did not participate in the development and validation process. You also need to find

* Full-scale field-testing will probably prove prohibitively expensive. One research and development agency produced a 60-page "Field Work Guide" (1970), from which excerpts are included in the Reference section (pp. IV-67-72) only to suggest some of the complex arrangements likely to be required in any elaborate field test of an educational product or process.

out how much explanation is needed at a new site and how best to present information in a package.

If time and resources permit, you should allow potential users to review and use the materials you intend to package for national diffusion -- at varied sites under varying conditions and with disparate populations. For any type of field testing, prepare in advance specific questions you want reviewers to answer. For example:

- Is the draft readable by/useful for the intended target audience?
- What (if anything) seems unclear?
- Where is more detail required/desirable?
- Are instructions easy/difficult to follow?
- Does format seem attractive/helpful?
- What should be added/deleted?

Use a structured feedback form, if possible, rather than asking for informal reactions.

If you have an opportunity to monitor use of your initial completed package at different adoption sites, then you'll be able to judge the strengths and weaknesses of your package and later revise accordingly. Potential users should be able to pinpoint areas where they feel they need additional information or where information you have provided seems unclear. Consultants or "experts" can assess the performance of users at adoption sites and indicate how your materials could be revised and thus improve the quality of future adoptions. If you plan an extensive field test, limit your print run accordingly so that you minimize the number of first-run copies left over when your revised version becomes available.

Designer/Graphic Artist

Unless you or someone on your staff has some special aptitude or some specific training in design work, you'll find it advisable to look for expertise elsewhere. Don't forget to check among your staff and within your district for "hidden" talent. A new history teacher may once have studied art. Your budget may be able to afford only consultation for a day or two or you may be able to budget for more time. Check first "who knows whom." Many present Developer/Demonstrator projects in the National Diffusion Network have successfully enlisted the aid of "friends of friends" at little or no cost. Larger printing firms frequently have designers or graphics personnel on staff; their services may be offered free as an inducement to earn your business. In enlisting a designer's help, keep in mind the following points:

- Ask to see samples of his/her work. Do they appear compatible with your own tastes? If not, search further.
- If you don't have prior knowledge of this person's work, ask for references and consult those clients.
- Review your budget, estimating the amount you'd like to spend and your upper limit.
- Check your time requirements and discuss these with the designer to be sure he/she can complete the required work when it's needed.
- Remember that although you have the final word, you're buying another person's professional skill and judgment.
- Specify clearly the tasks to be accomplished. The designer may suggest other steps or considerations which you may need to decide upon.

Possible assignments you may wish the designer to handle (depending on your budget and his/her expertise):

1. Design of a logotype for your project.
2. Typographic style for headings and narrative.
3. Design of a mailing container (package) or handling negotiations with a packaging supplier.
4. Based on "container" decisions, decisions on size and format for components of your package.
5. Design of any required templates.
6. Recommendations on paper stock, ink, and paper color(s).
7. Negotiations with printer(s) or assistance in working with printer(s).
8. Rough or finished layouts for specialized pages or brochures.
9. Tracking your project components through production.

Printer/Manufacturer

Unless all your print and/or-audiovisual materials are to be manufactured entirely within your district's own facilities, you will be scouting for external suppliers -- perhaps through the district purchasing office. The abilities and cooperativeness of these supply sources are likely to be vital to the success of your package. Even if your materials are to be duplicated/printed on school district equipment, the need for defining task assignments, requesting cost estimates,* deciding on quantities, establishing schedules, etc., remains. (See Section III, pp. 19-21.) Be sure to coordinate with

* Estimates may not prove exact since printers often estimate on the high side to protect themselves.

district administrative personnel about contractual and copyright policies and about planning for continued availability of your materials should your project close down later.

Distributor

Distribution of your package is discussed in more detail in Section III, pp. 26-32, but a major choice confronting you is to decide whether your staff, some other group in the district, or an external agency will handle distribution. During the early tryout stages, you may prefer to handle distribution of prototype and field-test versions. Later, when you're actively engaged in demonstration and training activities, distribution tasks may dilute your diffusion energies. You must also plan for the possibility that, after your project is no longer receiving funding, demand for your packaged materials may continue.

All distributors will store your materials and fill orders on demand while inventory lasts. If your product produces a profit for them, it will be continued; otherwise, they will probably stop handling it as soon as their contract with you expires. Major publishers and distributors effectively promote and publicize products. Some obtain orders through distribution of their own catalogs. Others advertise in selected media. Still others have their own field sales force or contract out direct sales work. Before signing a publication or distribution contract, ask for a specific plan that outlines how your product(s) will be promoted and sold.

Adopter

The adopter of your packaged program cannot accurately be visualized until you've negotiated and implemented several adoptions of your program outside your district. However, you can talk to Developer/Demonstrators in the National Diffusion Network and to others involved in diffusion (State Facilitators, intermediate agency personnel, etc.) to learn more about information needs they have encountered. They can provide insights into the different information needs of personnel in different roles in adopter districts and how information can best be presented. A growing literature on the subject is available; ERIC* offers such readable documents as Transferring Success which reports on a variety of

* ERIC, the national Educational Resources Information Center, is operated by the National Institute of Education of the Department of Health, Education, and Welfare as a service to educators. ERIC makes available to libraries and information centers over 100,000 unpublished, hard-to-find documents on all phases, levels, and subject areas of education.

adoptions that occurred through the National Diffusion Network in its first two years of operation. Also you can talk to those in districts that have already adopted exemplary validated programs imported from other states. By gathering their reactions, you can build an effective package and a successful overall diffusion plan.

Technical Service Agency

Your state education agency or the Federal government may have contracts with technical assistance groups which obligate them to assist you if you request the aid. Ask the program officer for your project about such contracts. Such services may include writing, diffusion guidance, advice, graphics and production, consultation, etc. Other free consultation may be available from a State Facilitator (see listing in Educational Programs That Work), marketing personnel in commercial educational publishing firms, and state and federal government offices in which dissemination of information has a high priority (e.g., ESEA Title I and Title IV, Right to Read, etc.).

Summary Worksheet

You may now want to list various people needed during your packaging effort. Divide the page into four sections:

- planning/preparation (including audiovisual scripts)
- review of draft materials
- reproduction
- distribution

Make notes on personnel available to help. Note also where you need assistance. This sheet should depict where you stand in terms of staffing for the preparation and production of your package.

BUDGETING

Budgeting doesn't come easily to many people. If this isn't a domain where you've had extensive experience, ask your finance office for help and then reach for your handy calculator. Your packaging budget may take several forms: what's required by any outside funding you may have secured; what's required by your own district accounting procedures; and what complements your management style and allows you to keep an eye on expenses. In each case your costs will probably be divided into such areas as:

- Personnel Services
 - Staff Costs -- direct labor costs
 - Consultant costs -- special consultants
 - Other -- temporary employment agency, substitute teacher fees, etc.
- Travel Expenses -- travel and per diem for field testing, consulting, etc.
- Communications -- phone, mail, shipping
- Printing and Reproduction -- plan for photo copies of early drafts as well as reproducing some prototype or final copies
- Supplies and Equipment -- paper, typewriters, other office supplies
- Other services -- public relations, conference registration fees, equipment, rental
- Indirect costs charged by district -- charges for office and storage space used by your staff, general administrative expenses

For your own accounting purposes, you'll probably want to breakdown your costs far more specifically, indicating projected quarterly costs for the year. By establishing quarterly estimates you can track expenses, noting over- or underspending so you can make adjustments in ensuing months.

Your major cost will undoubtedly be personnel including salary and benefits. Staff costs usually account for 60-70% of your expenditures. To figure these costs, first prepare an overall schedule worksheet, such as the one on page II-18, setting forth a possible time schedule for production of your packaged components. With such a schedule prepared for each package component, you can prepare an overall packaging time schedule. Then you're ready to assign staff members (and/or consultants) to task deadlines and to estimate the amount of staff effort needed. You may even want to prepare a staffing projection chart to show the number of days per month staff will be assigned to packaging work. Obviously if all staff work full-time on the packaging effort, this chore will be easy; however, if your staff split their time among several assignments, such a chart can prove a valuable budgeting aid. Knowing the projected number of days each person will spend on various project assignments permits you to estimate staffing costs. Don't expect that your first estimate will match the available funds. Planning an accurate budget will entail much massaging and shifting unless you have a good eye for this task.

One question often raised, is how to allocate staff effort. Estimates vary, but the following distribution may come close to actual effort expended.

Exhibit 6
Staff Allocation Worksheet

Task	Estimated Percentage of Total Effort
Planning	5%
Preparing Narrative	25%
Outside Review	5%
Revision	25%
Production	18%
Distribution	20%
Follow-up	2%

Thus, assuming that staffing costs will consume at least 60% of your budget, you can figure rough budget totals for each phase and estimate staffing costs accordingly. Depending on the rate of pay of various staff members, and your own estimate of degree of effort to be expended for each task, your percentage distribution may look quite different from the one provided. Also keep in mind that individual staff members will allocate time in different proportions. Some may be concerned only with preparing and revising the narrative, but have no assignments in distribution; others may be concerned only with production; etc.

Costs in other areas will depend on many decisions you'll be making. Will you rent a memory typewriter? Will you hire a writer/analyst? Will you produce AV components? And so on.

An Illustration

Project Catch-up, a reading and math program for elementary pupils, has operated as a Developer/Demonstrator for two years. Although a Project Information Package (PIP) has since been prepared, in the first years of operation such management information materials were not available. As a result, the staff developed four items as part of their package: a catalog or management manual; a videotape show; a synchronized slide-tape production;

and a brochure. The director of that project has provided some information and tips* which may now be helpful to you.

If you are planning for the first time to produce any printed brochure, catalog, slide show, or video tape and hope to achieve professional quality, allow for a larger budget than you at first consider necessary. Although "loving hands from home" items describing projects have been very inexpensive, they too often conceal the real costs because they include hours and hours of volunteer appropriated time. Now that your job is national dissemination, you won't have time to organize the troops back home. Now is the time to learn about the professional ad man, the printer, the designer. In the long run their products may tell your story better and may save you time and dollars.

The following is one project's costs for four sample items:

1. Catalog. An effective, non-complex 35-page brochure may cost in the neighborhood of \$7.40 ea. These actual costs of a sample brochure (for the first run of 100 copies) may be of assistance:

1. Typing. If you can't steal time from somebody else's secretary, count on 6 days at \$40.00 per day.

- a. Transcription of dictation
- b. First draft
- c. Second draft
- d. Third draft

2. Graphics

- a. Pictures. If you have to pay a photographer.....\$50.00 per day
If you don't have to pay a photographer..cost of film
(black and white), processing, enlargements...\$12.00

- b. Developing.

1. Plates.....\$12.00 per picture (10).....\$120.00
2. Multilithing.....By far the cheapest way to go unless you have some unusual access to an offset press

- 2.1. Per page.....\$3.50 per 100 copies
- 2.2. School press..\$.50 per 100 copies

- c. Cover. It is worth it to spend a little for good paper stock.

1. Paper stock.....\$4.00 (100 catalogs)
2. Printing.....\$3.50 (100 copies)

3. Consultant help. (We needed it.)

- a. Layout and graphics

1. Suggestions only.....\$100.00
2. Script if needed.....\$100.00

Total.....\$740.00
Per copy.....\$ 7.40

* The material on the next two pages was submitted by Fay Harbison, Project Catch-Up, Newport Beach, CA.

- II. Video Tape Show. Even if you have an unusually good district TV service, video-taping to be worth showing the public is something that needs professional help.

For one 12-minute production - black and white - the following estimate of costs may be helpful:

a. Tapes

1. 4 rolls @ \$11.50 each
2. Use of equipment.....if you can't get it free from school district count on \$100.00 in rental costs

b. Consultants.....6 days @ \$100.00 per day
(2 days in shooting alone and one in editing)

1. Two persons are suggested - 3 days of producer and 3 days of director

c. Cameraman.....1 day of shooting and 1 day of editing.....
@ \$75.00 ea. day

The most surprising thing about producing movies for TV is the amount of time it takes to write scripts, prepare the subject, rehearse, shoot and edit.

TOTAL.....\$896.00

- III. Synchronized Slide-Tape Production. For one 7-1/2-minute effective, non-complex 35mm synchronized slide production, the following costs were projected:

- a. Film and developing.....80 pictures (240 shots).....\$105.00
- b. Cameraman.....1 day.....\$ 75.00
- c. Consultant to write, organize pictures, do musical background and record.....\$675.00
- d. Tapes.....\$ 10.00

None of these cost projections took into account any staff time of teachers, the director, or the subject children who were free and the staff had produced most of the materials and scripts in advance. This means that in spite of many, many hours of planning on the part of regular staff, special productions need special skills and these need to be planned and paid for in the dissemination budget.

TOTAL.....\$865.00

- IV. Brochure. One double fold 8-1/2 by 13" brochure

- a. Card Stock.....\$ 2.66 (100
- b. Photograph Plates.....\$ 60.00 brochures)
- c. Photographer (and enlarged glossies).....\$ 50.00
- d. Layout Artist.....\$ 25.00
- e. Printing (multilith).....\$ 7.00

TOTAL.....\$144.66
1.44 each

Note that these estimates did not include staff time and cost. The only real guide is to make as realistic an estimate as possible and then double it. It's far better to be over-budgeted than underbudgeted. Printing costs are actually only a small item within your

overall budget. Another \$50 worth of paper and printing costs might produce 1,000 copies and significantly reduce your per copy cost.

The topic of budgets highlights, once again, your situation in relation to packaging. If you're funded only to package, you should have sufficient funds to produce a quality package. If your budget must cover other diffusion efforts along with packaging, you'll need to weigh carefully various cost factors, cutting corners where necessary. If you have little or no funding for packaging, then you'll be even more dependent on free help from friends and "stolen" hours of staff time that don't require out-of-pocket expenditures.

Taking time to develop a projected budget is important, for it will dictate the real extent of your packaging effort.

SCHEDULING

Planning and Adhering to Time Schedules

Planning a time schedule for preparation and production of your packaged components is vital. First, think in terms of your overall diffusion plan. Tight time schedules spell disaster. Don't promise piecemeal delivery as each item is completed. Plan to complete everything before delivering anything. Then, make modest plans for the first year so that there won't be a major catastrophe when your first tryout indicates the need for a complete rewrite, your analyzer/writer quits, and the printers go on a three-month strike.

What would be the optimal time for delivery of completed items to your doorstep? What is the latest possible date for delivery? With those dates identified, back up in time and sketch out a proposed schedule of events. Each component of your package will have to pass through several stages: planning, preparing narrative (including researching information and drafting narrative), outside review and critique, revision, production, distribution, and follow-up.

The number of components you plan to prepare, the number and skill level of available personnel (staff or outside), and available funds will obviously dictate your proposed time schedule. For example, if one person must bear the primary burden and you expect

several components to be prepared, your time schedule must be strung out to reflect this constraint. If, however, several people can simultaneously work on the components, the time schedule can probably be collapsed.

Many internal factors can affect scheduling:

- The amount of work already completed (or merely needing minor revisions).
- The complexity/comprehensiveness of the total package you plan to develop.
- The commitment of project staff to other necessary (non-package-related) duties.
- The extent of field-testing to be conducted.
- Absenteeism, illness, and other personnel factors.
- Previous experience of staff with packaging-related work.

Another important factor is the availability of external assistance -- when and where can individuals and contractors be assigned to complete tasks to speed up production and/or meet deadlines. What is the relative proximity of suppliers (designers, artists, printers, binders, etc.) -- and how will their present workloads affect your scheduling?

The school-year calendar -- and its cycles for curriculum selection and adoption -- is another external variable. How does your projected production timetable fit into the decision cycle in districts? You may not be able to adjust your production to such timetables, due to your funding cycles, but keep such factors in mind. Whether you direct your efforts to district-wide adoption or to entry at the building level, you will want to determine whether a formal curriculum selection process exists. If the time has come to reconsider the reading program, a committee will be formed to tackle that challenge. Some begin deliberations one full year before the time new materials are due to go into classroom use. Recommendations then go to the superintendent in the winter and to the school board in the spring. Actual purchase orders may not be issued to vendors* until as late as June, for August delivery. (Other adoptions will occur in mid-January during a semester break.)

You may want to work out an overall performance schedule similar to the following one. Across the top, plot out the months of the year. Prepare a performance schedule for each component of your package.

* In many districts a vendor must be qualified by obtaining prior listing as an approved resource to whom purchase orders may be issued.

Exhibit 7
Performance Schedule

Tasks	Months											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
A. PACKAGE PLANNING												
1. Identify package components	■	■										
2. Assign staff responsibilities	■	■										
3. Prepare packaging budget	■	■										
4. Prepare Performance Schedule	■	■										
B. TEXT PREPARATION												
1. Plan content & prepare outline	■	■										
2. Write and type first draft		■	■	■	■	■						
3. Obtain outside review (conduct field test, if possible)				■	■	■	■					
4. Revise					■	■	■	■				
C. COMPONENT PRODUCTION												
1. Type final copy							■	■	■			
2. Select photos/identify graphics				■	■							
3. Produce layout							■	■				
4. Obtain printing estimate (update as required)						■	■	■	■			
5. Select mailing container							■	■				
6. Print								■	■	■		
D. PACKAGE DISTRIBUTION												
1. Prepare free copy mailing list							■	■	■	■		
2. Distribute copies per list										■	■	
3. Establish pricing policy								■	■			
4. Set up storage for inventory								■	■	■		
5. Fill requests as received										■	■	■
6. Maintain use and accounting records										■	■	■
7. Use Xerox or sample copies to seek external producer/distributor							■	■	■	■	■	■

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Where to Begin

A scenario for getting started might flow like this:

1. Look to see what you already have; identify gaps. You may have polished materials that can form part of the package without any revision.
2. Get something to look at:
 - a. an outline of your final packaged version;
 - b. a sample "chunk" -- one chapter, one episode, one something.
3. Get some more on paper -- more of the same or a chunk of another component.
4. Read and review the first pieces.
5. Begin to look at the pieces as parts of a total structure.
6. Finish up one entire component in prototype form and ask for an external review.
7. Finish up another component -- and so on.
8. When you have a full prototype, try it out with persons outside the project. If possible, use it in a real adoption situation where you're providing technical help.
9. Revise, based on feedback.

You should start with the most important aspect of your program. It may be the management or the instructional materials for the learner. Prepare first those elements your target users will most want to know about.

Another, but less preferable, approach would be to start producing what's easiest for your staff in light of their other tasks. Or...start on a chunk that's small and not too costly, so that your first production experience is relatively manageable and decisions can be reversed if unforeseen errors creep in.

If at all possible, leave awareness materials that describe your package until the very last. It's much easier to do summaries after the details are complete. Then, too, if you prepare and print summaries first, you'll find yourself tied to statements that seem inappropriate after the more in-depth analysis required for detailed manuals.

Before you prepare your final timeline, you'll want to read through Section III which details various production considerations. After reading that information, you should be ready to make final decisions regarding staffing, budgeting, and scheduling.



PRODUCTION CONSIDERATIONS

PRODUCTION

Planning

Section II focused on the overall management of the various components of your package. By now you should have a clear idea of the intent and extent of the packaging effort you envision for your program in light of your financial resources, the time available, and the kind of personnel you can draw on. This section will outline for you some technical considerations involved in production of your package. If you plan to prepare a single manual or an explanatory brochure, your task will be rather simple and only certain portions of this section will be applicable. However, if you're planning a multi-component package, you should find most of this advice useful.

To help with your task, make a rough worksheet similar to the sample. Consider this a working document, subject to continuing revision. But take time right now to outline what you foresee as the separate components of your package, outlining briefly intended users and proposed content. Later, as you proceed through this section and as you consult local experts, you may decide to revise further, perhaps by combining some components or creating others to take advantage of printing and production economies.

Production of your package will be a time-consuming process, but careful preliminary planning and consultation with others who have already faced similar challenges will reward you with a completed product of good quality. Whether or not you're able to afford the assistance of a designer or graphics consultant, you should begin production of your package by requesting printing estimates for the components of your package while concurrently investigating possible container or packaging alternatives. Your packaged components may determine the nature of your container or vice versa. Look into costs associated with printing and binding the materials in your package. If you plan to duplicate or print your manuals in your school district, then you'll be controlled by what your district's equipment can handle. If, however, you are considering contracting with an outside printer, other options will open up in terms of size and binding possibilities.

While consulting your printer, also investigate container possibilities. Any material sent through the mails will need protection, whether you choose padded envelopes, available boxes with added stuffing, or a specially constructed box. Even if you're planning on producing only a single manual, you must consider ahead of time how it is to be distributed. Consider -- and get prices for -- alternative packages. For example,

Exhibit 8
Production Worksheet

Component	Intended Users	Proposed Content	No. of Units	Copies Required	Estimated Cost
AV OVERVIEW (Film-strip, cassette tape)	District staff & linkage agents; school groups considering project; adopters	Program objectives, basic structure, personnel requirements, cost information	60 frames 15 minute tape	100	\$300 \$215
INTRODUCTORY BROCHURE (Self mailer)	District staff & linkage agents; school groups considering project; adopters	General introduction to program	One page	10,000	\$540
PROJECT MANAGEMENT MANUAL	Project Director	Goals/objectives, management, budget, staffing, planning, materials required,	20 pages	200	\$185
CLASSROOM MANUAL	Teachers and resource personnel	Day-to-day planning and management, curriculum materials, diagnosing student needs	20 pages	500	\$275
TRAINING MANUAL	Project Director; lead teacher	Project goals, preservice training, inservice training, follow-up activities, materials	25 pages	600	\$380
EVALUATION GUIDE	Directors, principals, and outside specialists	Planning and managing project evaluation	15 pages	200	\$160

III-2

will the manual you're planning fit into a regulation-size manila or padded envelope or will it be too bulky? If the latter is the case, several options are open to you. For example:

- What's the cost of specially made envelopes?
- Is standard boxing available for the projected size?
- Should you reduce the length of the narrative?
- Should you plan the narrative material in several volumes and package them separately?
- Can you reduce the size of the type face, thus reducing the number of pages required?

Ask the container manufacturer for ideas on how your components can be packaged most economically. Knowledge about this area of specialization can suggest alternatives unlikely to be considered by those without professional experience. As you investigate different packaging alternatives, keep a careful accounting of costs involved in the different options as well as estimates of the time that will be needed to obtain each type of packaging. In addition, use the worksheet you started earlier (p. III-2) and add cost information in the available space. This is your decision point to think about different combinations of sizes and bindings and the packaging each will require.

For estimation purposes, make a rough page count and assume use of only one paper weight for all manuals (except possibly a brochure). For the worksheet estimates shown (p. III-4), each manual used 20 pound (20 lb.) bond paper for content pages, was printed on two sides, used cover stock for front and back covers, was bound with staples, and required no photographs or typesetting. For the self-mailing brochure, costs were based on 70 lb. book embossed, colored paper stock, two photographs (halftones), folding to fit a #10 envelope size, typesetting for the two sheets of copy, and a service charge for layout work. Actual costs will vary depending on where you're located and the "deal" you can negotiate.

With these basic costs estimated, you'll be able to compare costs for manuals having different bindings and sizes and different packing alternatives. Also, keep in mind any unusual time constraints involved. For example, you might save some money by using one type of currently available container; but, if it won't be available any time it's needed, what problems may arise? With the size of your different manuals settled and your packaging container selected, you're now ready to proceed with design of the different components.

Exhibit 9

Production Worksheet

Component	Intended Users	Proposed Content	No. of Units	Copies Required	Estimated Cost
AV OVERVIEW (Film-strip, cassette tape)	District staff & linkage agents; school groups considering project; adopters	Program objectives, basic structure, personnel requirements, cost information	60 frames 15 minute tape	100	\$300 \$215
INTRODUCTORY BROCHURE (Self mailer)	District staff & linkage agents; school groups considering project; adopters	General introduction to program	One page	10,000	\$540
PROJECT MANAGEMENT MANUAL	Project Director	Goals/objectives, management, budget, staffing, planning, materials required,	20 pages	200	\$185
CLASSROOM MANUAL	Teachers and resource personnel	Day-to-day planning and management, curriculum materials, diagnosing student needs	20 pages	500	\$275
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EVALUATION GUIDE	Directors, principals, and outside specialists	Planning and managing project evaluation	15 pages	200	\$160

Designing Your Packaged Components

Both your printer and your designer (if you're using one) will be able to offer valuable advice and ideas. Cutting costs while producing a high-quality product are not new challenges to them.

Experience in noncommercial packaging has shown that school people react favorably to products with the following characteristics:

- Visual appearance is simple, clean, and inviting.
- Information is clearly presented and well organized.
- Materials are durable and will not fall apart easily when used.
- Materials are not flashy or costly in appearance.
- Component parts are easily identified as part of the overall package and cross reference each other.
- Weight and bulk are minimized where possible.
- Typography is clear and legible.

With the advice of your designer, you'll now need to make decisions regarding:

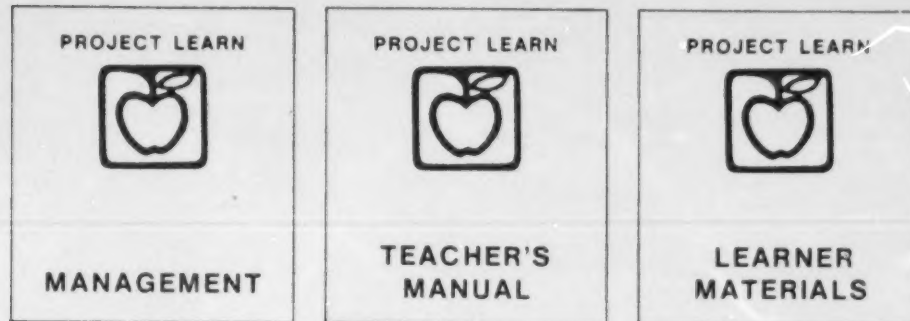
- Organizing and laying out copy
- Page size and use of templates
- Graphics
- Type faces
- Paper and ink
- Binding
- Containers

Space prevents a lengthy discussion of printing practices, but a number of resources are readily available should you have time to read more thoroughly in this field. (See recommended readings, pp. IV-131-133.)

A number of short cuts are available. They can save you dollars and assure a polished, attractive product. Some ideas are found on the fact sheets in the hints sections (pp. III-13-18); others include:

- Consider using your own logotype (or special identifying mark) to call attention to your package. Some projects use such a logo on all brochures, stationery, envelopes, etc.
- Combining line art and one or more distinctive photos, and using two bright colors, can lead to a professional-looking common cover design which you can carry through for each printed component

(handbook, guide, manual, box, etc.). The only element that would change for each component's cover would then be the title of that booklet.



- Ask teachers in your district what makes certain manuals easier to use or more attractive to the eye. If your package contains manuals for people in positions other than teaching, seek their advice and reactions, too.
- Study commercially and noncommercially prepared packages. What attracts your attention; what alienates you?
- Use of typeset composition should lead to a more professional appearance but can be expensive, depending on the number of pages. Consider using typographic composition for introductory materials (e.g., brochures, handbook covers) and typewritten copy for straight text matter.
- Use colored paper instead of white and colored ink instead of black to add a touch of polish to your materials at little extra cost.
- Additional variation, at no cost, can be achieved by asking a printer to "drop out" or print a page in reverse (i.e., white characters on a black ground, as contrasted to regular black characters on a white ground). However, don't reverse small type or art in this fashion; it will prove to be unreadable if you do.

Organizing and Laying Out Copy

Help from a designer or graphic artist can be invaluable at this important stage. Even if you plan to type your manuscript (narrative and headings), a designer can assist you by planning the basic organization. Two things must be prepared: (1) directions for the typists and (2) a template.* Directions for the typist are essential, especially if

* See Reference section, p. IV-90-91.

you plan to use more than one person. After consulting your artist or designer, prepare a style sheet that gives directions as to: paragraphing style, underlining, use of different headings, footnoting style, page numbering, indented quotations, etc. Attention to such detail will result in a better organized and more polished typescript.

Research studies provide some guidelines that should make your manuscript more readable and interesting. For example, when you prepare narrative documents, double-spaced narrative should not exceed a width of 6½"; single-spaced or space-and-a-half text matter should not exceed 5½". (The eye becomes confused and cannot follow long lines of copy.) Consistent white space on all four margins is restful to the eye. Page numbers (folios) should fall in the same position on all pages; a printer then can use these folios to line up the pages of the manual for binding.

To save on paper costs, copy size can be reduced. A 15% reduction is still easily readable. (Text in this manual has been reduced 15%.) A greater reduction is unsuitable unless you expect a user only to consult some pages rather than reading your material page by page. The example below shows full size copy, 15% reduction, and 30% reduction.

The Dale Avenue Project provides a threefold program for pupils in prekindergarten through 3rd grade. Performance objectives based on an extensive needs assessment of preschool children, provides (1) a minimal, developmental, sequential early childhood curriculum in 10 areas; (2) a pre- and posttest; (3) a device for grouping, individualizing, record keeping, parent reporting, and summarizing

The Dale Avenue Project provides a threefold program for pupils in prekindergarten through 3rd grade. Performance objectives based on an extensive needs assessment of preschool children, provides (1) a minimal, developmental, sequential early childhood curriculum in 10 areas; (2) a pre- and posttest; (3) a device for grouping, individualizing, record keeping, parent reporting, and summarizing

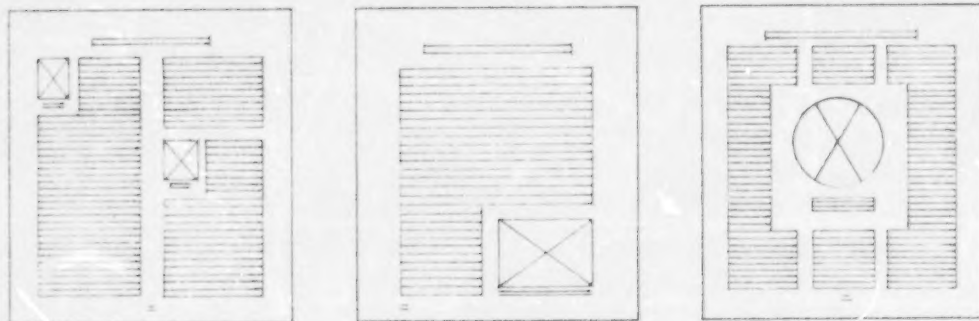
The Dale Avenue Project provides a threefold program for pupils in prekindergarten through 3rd grade. Performance objectives based on an extensive needs assessment of preschool children, provides (1) a minimal, developmental, sequential early childhood curriculum in 10 areas; (2) a pre- and posttest; (3) a device for grouping, individualizing, record keeping, parent reporting, and summarizing

Charts and/or tables provide relief for the reader as well as often serving as a vehicle to present certain information most clearly. Allow time to plan such diagrams carefully so as to produce a clear, readable product. Aim for simplicity and minimal word use. Forms that may be pulled out for use by readers should not be reduced, but others can be to save space (if you've kept words to a minimum).

Decide whether typewritten copy or handwritten copy is preferable. If you choose handwritten, use graphic inking pens to produce a strong image that will reproduce well. Proper use of different thicknesses of lines can make a table or form far more interesting. Some artists prefer to box in tables completely; others leave areas open. You'll have to decide on your own preferences.

Inclusion of illustrations, whether line art or photos (halftones), also can help to enliven a typescript. For this draft manual, illustrations were consciously limited due to time and budget constraints, but carefully chosen illustrations usually do help to clarify information.

Insertion of line artwork also offers relief from text matter. Although you may want someone to produce such artwork, you don't necessarily need to pay for special layout pages. A typist can allocate and adjust for any necessary space where artwork is to be inserted.



Page Size and Use of Templates

Preparation of a template is important. A template is a form prepared to show a typist where top, bottom, and side margins occur. If one is used as a backing page, a template's heavy ink will show through the top sheet. If copy is typed directly on a

template sheet, light blue marks that don't reproduce are used as guidelines. Watch for the position of page numbers (called folios); they should fall toward the outside or be centered on the page. Cross marks on the template can show the typist exactly where to place the folio.

In preparing your template, consider whether or not your copy will be scaled down. The template should be scaled accordingly. You can establish top and side margins on an 8½"x14" sheet to scale down evenly to many sizes. The text for this 8½"x11" manual was typed on 8½"x14" template sheets with approximately 7½" wide copy (which reduced to 6½") and 11" depth copy (which reduced to 9¼" copy). Similarly an 8½"x11" page can be reduced in scale to a smaller size.*

Graphics and Paste-Up

Your designer or graphic artist may need to paste-up some pages in your package. Usually this work will be needed only for covers, title pages, special divider pages, and pages where art work or pictures are to be placed. The graphic artist positions the different sections of the page on a piece of paperboard to form what's called a mechanical. A printer then makes a printing master from the mechanical which acts as a camera-ready unit. For other narrative pages, a printer will make masters directly from your typed pages. Unless you can obtain someone's services at no cost, you'll want to minimize the number of pages requiring paste-up work to hold down costs. If second colors are needed, these can be indicated by the artist on a glassine overlay; you can also achieve the "look" of a second color by printing with black or colored ink on colored stock.

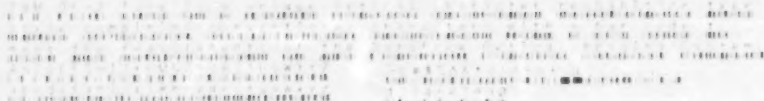
Type Faces

Different type faces are suitable for different types of documents and, within those documents, for different uses. For example, the following chart (excerpted from an IBM Selectric typewriter type styles brochure) shows a variety of typing elements that can be purchased (approximately \$18 each) to fit certain typewriters. (See also Reference section, pp. IV-108.) Some are useful for headings, others for brochures, still others for informal letters, and so on. Mixing too many different type faces in any publication leads to confusion and fussiness. Also, any time you specify a change in type face, a typist must stop and switch elements, thus increasing typing time. Typing elements

* See Reference section, p. IV-92-93.

also come in different "pitches" or number of characters per inch (e.g., 10-pitch produces larger type than 12-pitch). Note, examples below have been reduced.

Type Style
and Order Number

Printing and Publishing 1 ANSI OCR 1167170	10 Pitch	IBM ANSI Type meets the American National Standards Institute specification for A font, size 1. It is available in correspondence or keypunch simulator keyboard arrangements. ABCDEFGHIJKLMNOPQRSTUVWXYZ YfH% g*{}-->+<?/"'.,:; abcdefghijklmnopqrstuvwxyz 1234567890
AN3/360 1167105	10 Pitch	IBM AN3/360 TYPE STYLE LOWER CASE, ALPHABETIC CHARACTERS, NUMERALS AND SYMBOLS ARE DESIGNED TO MATCH .079 INCH SIZE AN3 STYLE POPULAR ON IBM SYSTEM/360 CHAIN/TRAIN PRINTERS. ABCDEFGHIJKLMNOPQRSTUVWXYZ @#\$%&*()_-=+<>?/"'.,:; abcdefghijklmnopqrstuvwxyz 1234567890
AN3/360 Bold 1167084	10 Pitch	IBM AN3/360 BOLD TYPE LOWER CASE, ALPHABETIC CHARACTERS, NUMERALS AND SYMBOLS ARE DESIGNED TO MATCH .079 INCH SIZE AN3 STYLE POPULAR ON IBM SYSTEM/360 CHAIN/TRAIN PRINTERS. ABCDEFGHIJKLMNOPQRSTUVWXYZ @#\$%&*()_-=+<>?/"'.,:; abcdefghijklmnopqrstuvwxyz 1234567890
DF-2 OCR 1167659	10 Pitch	

Paper and Ink

Paper types, colors, and weights vary considerably. A local printer can show you samples of available paper stock and point out some advantages and disadvantages. The fact sheets (pp. III-13-18) provide some basic information. Using what a printer already has on hand or what may be surplus from a previous job can save you money. In selecting paper, keep in mind the uses you anticipate (one time only or repeated; adult or child use; etc.), suitability for printing, available colors, bulk (watch for binding problems, shippage costs), opacity (print on the reverse side may show through), and what's communicated to a user (overly expensive, too slick, cheap, etc.).

Ink colors, which also vary, can be used to attract attention at little cost so long as you don't mix ink colors on a page or within a manual. Presses must be cleaned when ink color is changed, thereby increasing printing costs. Above all, don't use pale ink for text matter, and be sure the ink will stand out sharply against the paper background.

Avoid use of two-color printing if possible; printing costs can almost double. However, use of Ben Day Screens* can provide some of the impact of a second color; you'll

* A Ben Day Screen, a piece of film with a screen pattern, creates an overall pattern of dots or lines. It can provide a light-colored tint block (e.g., pale red or pink) at the same time a solid color (e.g., dark red) is being printed.

need graphics help in this case. Color ink on color paper (if the two harmonize) may be the most sensible alternative.

Binding

As with other decisions, you must weigh cost against appearance and intended use. Some types of binding will prove unsuitable, depending on the size and bulk of your various package components. But once you've eliminated the unsuitable methods, you must weigh cost considerations against your intended design. (See pp. III-17-18) for some detailed ideas.)

Containers

If your worksheet (p. III-2) shows that you foresee preparing several different booklets and perhaps audiovisual materials, then you will want to investigate carefully different packaging alternatives.

- Do local packaging suppliers have suitable preformed packages available?
- Which packaging suppliers will economically design packages to fit your materials?
- Can everything be slipped into large padded envelopes or readily available boxes? Will you need packing materials to fill empty spaces?

When considering different packaging containers, keep in mind the following points:

- If possible, select a reusable container that can be used to store your materials at adopter sites.
- Choose compact, lightweight packaging. Check postal costs and weight and size limits.*
- Check for durability. Try dropping a filled box and see if any damage occurs. (The postal service often is not gentle!)
- Explore whether stock items (protective inserts, dividers, and platforms) can be used to keep materials from sliding around.
- Check to be sure that your materials will not rattle around in the container.
- Check planned organization of the pieces in your package. Will it be obvious to the user how to repack the container?

* Your local postmaster can supply you with a copy of the current edition of Mailers Guide.

- Compare costs among suppliers. Look for contrasts between available containers and specially designed boxes.
- Consider whether you want a single container or a container within a container. The outside of any box will be treated roughly during mailing.
- Aim for just enough adequate protection. Too much protection can unnecessarily increase production and mailing costs.

Read through the following fact sheets and consult your designer about those choices that seem appropriate.

Exhibit 10

Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
Graphics <u>LINE DRAWINGS</u> (Black and White)	Highly effective for translating data into charts or graphs; showing organization relationships; conceptual schematics, etc. Requires no special processing, can be printed as part of text Can be modified relatively easily for future use and/or updating of data Provides best way to highlight or emphasize major points or topics	Requires skill interpreting data into pictorial mode Can be time consuming if too much data is presented in a single figure or exhibit Size of drawing may require reduction to a level at which legibility is unacceptable Can not achieve "true-to-life" facsimile	Artist's cost may equals photo cost Freelance artists should be considered vs. establishing an in-house graphic arts capability if anticipated volume of work is low Provision should be made to provide well-controlled storage area for protection of masters
<u>PHOTOGRAPHS</u> (Halftones)	Provides "true-to-life" presentation Easily understood by viewer and usually more attractive than line drawings	Requires special, more expensive processing Requires high degree of technical skill (e.g., determining screens, reduction, cropping, etc.) Requires top quality photos for good reproduction	Photos should be carefully selected to ensure that they convey intended message Discretion should dictate number of photos used to avoid "over kill"
<u>GRAPHIC AIDS</u> (Formatt, Lectraset, Chartpak, etc.)	Inexpensive means of creating high quality artwork Preprinted symbols and signs offer high creative range Provides excellent reproduction quality	Large black areas may "wash out" in reproduction Requires experienced layout person	Staff should have some training in typography and graphic layout and design Use of graphic aid materials should be standardized insofar as brand and application is concerned

111-13

Exhibit 10

Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
Text Preparation			
<u>TYPEWRITERS</u>			
Manual	Least expensive Readily available	Restricted to one type face, fixed spacing, and (usually) cloth ribbons Low quality of original work precludes good reproduction	Use of manual typewriters should be confined to production of draft work, unless there is no alternative
Electric	Higher production capability justifies higher cost Use of plastic ribbon produces high quality originals Units with changeable typing elements capability provide selection of different type faces which can be used to accentuate various parts of text material Provides excellent uniformity <u>Note:</u> Use a blue, non-reproducing pencil to mark on final copy. Use Sno-Pak (or equivalent) to make changes or corrections rather than correcting tape which may flake off and expose the area corrected.	Higher initial cost More expensive to repair Will not take same degree of abuse as manual units	Units with 1/2 spacing (vertically & horizontally), 10 and 12 pitch control and built-in correcting tape offer maximum flexibility and speed. Should definitely be considered for high production offices.
<u>WORD PROCESSING TYPEWRITERS</u> (Lexitron, Vydek, IBM, etc.)	Units can be rented or leased for short periods Units have "memory" capability which may be either on tape (and storable) or in the unit Previously typed (and stored) material can be "recalled" to make changes or corrections	Units MUST be fully utilized to justify high rental/lease cost Requires more operating space than regular typewriters Requires special training of staff Limited selection of type faces	Decision to rent/lease this type of machine must be based on thorough cost-benefit analysis Memory capability is a good feature IF material is to be revised frequently Additional benefit is capability to produce repetitive typing jobs rapidly and accurately

III-14

Exhibit 10

Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
(Text Preparation - Continued)			
<u>TYPESETTING</u> Wide range of type face styles, sizes, and weights available which can not be matched by typewriters Right hand margin can be justified Final copy will reproduce best of any method Selection of small type face allows maximum use of small space Note: All text material should be proofread by highly competent staff. Only those persons who have this skill should be used to ensure accuracy and correction of all errors and/or omissions. Be sure to schedule adequate time for proofreading as part of the production process planning effort.	Wide range of type face styles, sizes, and weights available which can not be matched by typewriters Right hand margin can be justified Final copy will reproduce best of any method Selection of small type face allows maximum use of small space Note: All text material should be proofread by highly competent staff. Only those persons who have this skill should be used to ensure accuracy and correction of all errors and/or omissions. Be sure to schedule adequate time for proofreading as part of the production process planning effort.	Time consuming since draft material must be sent out to work facility. Turn around time may pose significant problem in meeting deadlines Expensive method. Costs can easily exceed \$20 per hour, depending on location Buyer is responsible for all proofreading and detection of errors. Changes not due to vendor's error will incur extra charges	Investigate prices of several vendors. Obtain bids if job involves large number of pages Use ONLY competent proofreaders to review all galley proofs. Oversight of errors will cost you money if final copy has to be revised. Refrain from making editorial changes as much as possible. They are costly. Remember that the final galley proofs must be pasted up in the format and location previously decided upon.
Paper & Ink			
<u>WEIGHTS OF PAPER</u> Light weight paper Heavy weight paper	Minimizes thickness of manual Requires less storage space Reduces mailing costs Suitable for covers & dividers as well as text. Higher durability & better "feel". Can be printed back-to-back *	Reduced opacity may allow printing on following page to show through Not suitable for back-to-back printing which may offset savings in mailing costs Increases bulk of manual Mailing costs increase due to higher weight	Minimum weight used should be no less than 20 lb. bond or 50 lb. book stock Check with printers for buying surplus stock from another job at reduced cost Avoid "special" paper -- it is usually much more expensive * Back-to-back requires fewer sheets

111-15

Exhibit 10
Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
(Paper & Ink - Continued)			
<u>TYPES OF PAPER</u>			
<u>Bond</u>	Least expensive, strong, and durable Use for letterhead stationery, flyers, leaflets, & envelopes	Maximum weight - 24 lb. Not suitable for brochures Limited opacity and colors	Usually has a smooth finish, but laid finish may be available
<u>Book</u> (Regular/Vellum)	Very versatile. Good for reports and manuals; best for graphic artwork; and excellent for back-to-back printing Vellum absorbs ink well Good weight range (50-80 lb.) Available in wide range of colors	Requires more ink for large surface areas Not suitable for use in preparing final copy due to difficulty of erasures	
<u>Text</u>	Good for booklets and advertising publications Provides a fancier light-weight "textured" paper for special presentations	Usually more costly Unsuitable for lengthy reports, manuals, or flyers in lighter weights	Requires special care when printing halftones
<u>Coated</u>	Most effective for printing large areas and multi-color jobs (covers, brochures, advertising posters, etc.)	Most expensive material as a rule	Surfaces vary from eggshell to glossy Available in light and heavy weights
<u>COLORED PAPER</u>	Attracts attention Provides variety to publications which otherwise could be monotonous	Darker colors (shades) not suitable for using black ink	Avoid using several different colors in the same production or inserting colored dividers. Either practice can cause higher collating costs.

Exhibit 10

Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
(Paper & Ink - Continued) <u>COLORED PAPER</u> (Continued)			Use light colors for easier reading and minimum eye strain Use pale colors for any page that users will reproduce
<u>COLORED INK</u>	Adds interest and a touch of "polish"	Printing costs may be higher when colored inks are used because the printer has to clean the press for each change in color	Different colors should not be used within the same document or printing costs will be increased Readability of colored ink on colored paper should be checked carefully to ensure sharp contrast
Binding <u>GLUE & GAUZE</u>	Inexpensive Allows user to remove sheets	Sheets may become detached in repeated use Spine identification is not possible	Can be applied to spine or top edge
<u>STAPLES</u>	Least expensive Best for binding thin documents Simple and fast	Unattractive Restricts full opening Pages can be torn off	Wire stitching. Can be saddle stitched through center of single fold documents; side stitched along spine edge; or corner stitched
<u>SPIRAL BINDING</u>	Allows pages to lie flat in open position Sheets can be removed or inserted	More costly than glue & gauze Documents do not stack or pack well Requires prepunching of sheets to be bound	Consists of plastic or wire "fingers" inserted through prepunched holes Plastic binders available in colors

111-17

Exhibit 10

Fact Sheet

Item	Advantages	Disadvantages	Points to Consider
(Binding - Continued) <u>VELD BINDING</u>	Very strong Pages can not be removed Takes only 1/4" of margin	More costly than spiral type Sheets will not lie flat when document is opened	Good application for documents which are to be kept intact Consists of plastic strip with molded fingers inserted in prepunched holes
<u>PERFECT BINDING</u>	Very durable and attractive Spine identification possible	Expensive when used to bind lots of less than 300 units	For use on documents more than 1/8" thick
	Note: If it is decided NOT to bind a document, but rather to produce it for insertion in looseleaf binders, all sheets should be prepunched. Units to be shipped to users may be packaged by wrapping, banding, or shrinkwrapping in plastic *. * Shrinkwrapping uses clear plastic which is shrunk with heat to completely seal the item to which it is applied. Omission of binders in shipping units will save part of mailing cost as well as cost of binders.		

Working with a Printer

Check first with your school district to see whether local staff want to and can handle your work. Most exemplary projects within the National Diffusion Network have found it easier and more efficient to work with outside printers. (Few school districts seem to want to get into the printing business!) In any case, shop around. Talk to several printing firms about your needs and their capabilities before you set the final specifications; ask for price and delivery quotations. (Some printing firms even offer free layout and graphic services to win you as a client.) Printed materials are usually more appealing than mimeographed materials which are, in turn, usually more appealing than spirit master reproductions.

If printing is new to you, consider also the personal rapport you establish with different firms. If you plan to print several different items, you'll need to feel comfortable with the firm's representative. Be sure to check with others who have dealt with any printers you're considering. Some may deliver late or fail to meet your quality standards.

Preparing Specifications

A contract with a printing firm is based upon written specifications. These "specs" enable the printer to develop a written cost and delivery estimate. If you know someone who has prepared specs before or have available a consultant, that experience can be very helpful since quality and prices vary tremendously. However, any reputable printing firm will take the time to show you different quality papers and help you compare prices. Many printers will be more than happy to "spec" a job; this information can then be used to secure firm bids. Review the "specs" carefully; you can save yourself a lot of money if the printer is held clearly responsible for all corrections that aren't your fault.

Specifications must include:

- Quantity to be printed (ask for estimates on various quantities, such as 500, 1000, 2500, 5000)
- Paper weight and color
- Ink color
- Binding process
- Mode of printing (multilith, offset, or other)

- Delivery date(s) for:
 - (a) "blue" lines or "brown" lines*
 - (b) finished inventory
- Penalties (if any) for failure to meet promised delivery deadlines

Other points to bear in mind prior to your discussions with printing firms include:

- Left-hand pages are imposed so that they carry even numbers in the pagination process, and right-hand pages bear odd numbers. If your materials can be planned so that the total pages of each separate booklet or handbook are divisible by 8 or 16, you'll probably achieve some economy in printing.
- Your choice of printing process is likely to fall between multilith or some other offset process, rather than letterpress or gravure.**
- Reducing page size to 5½"x8½" or 6"x9" is likely to save money both in printing and in binding.
- If you really need a second color of ink, discuss this requirement with several printing firms ahead of time. Some economies may be possible, depending on available press equipment.
- Ask for price quotations on an overrun of components of your package. Get a price ahead of time for 100 or 1000 extra to be added to your first press run. If you run short, going back to press later is expensive. The worst that could happen would be that you'd later have to give away unneeded copies as promotional samples; but don't print extras unless you really plan to use them.
- If you expect to revise the contents of some of your manuals, but expect to keep the same outside covers, ask for price estimates for printing extras on the first press run.
- If you select a binding method where pages won't lie flat when opened, direct the printer to position the pages slightly off center so that your narrative won't run into the "gutter" (place where two facing pages meet at the binding edge).

* These are a set of proofs that enable you to check all the various items to be sure every element is correctly positioned prior to actual presswork.

** See, for example, any reliable, current handbook on printing and production for definitions of technical terms, or ask someone in the printing and graphics business to explain them to you. A useful sourcebook is *Printing and Promotion Handbook* by Daniel Melcher & Nancy Larrick (3rd edition, McGraw-Hill, 1966). Others include such paperbacks as *Pocket Pal (A Graphic Arts Production Handbook)* sold by International Paper Co., 220 E. 42 St., New York 10017, and a series on "How to Plan Printing to Promote Business" issued by Warren Co., 225 Franklin St., Boston, Mass. 02101.

Printing and Proofing

Because proofreading of all copy is an important task, ample time should be allowed. The most precise method is to use two people; one reads aloud, noting all punctuation marks, while the other person checks the copy. Check to be sure all corrections are marked accurately before delivering copy to a printer.

Also check and proofread carefully all mechanicals before delivery to the printer. Be sure to tell your printer that you want all mechanicals returned to you for safe-keeping, along with the negatives used for plate making. Wrap and mark your printing, duplicating, and audiovisual masters and artwork (including negatives or contact positives when returned by printers) and store them safely where you can easily locate them. You'll need them if you later decide to reprint.

A printer will advise you how he wishes copy delivered. Many printers will request that you complete a pagination sheet* showing the organization of your books. This sheet serves as a guide when setting up the pages. Before actually going to press, the printer will send you "blue" lines or "brown" lines representing what is to be printed. Check them carefully; once you have approved them, any mistakes found later become your liability. Watch for pages incorrectly placed, pages askew, marks on pages, faded printing. At this point, don't change your mind and add or delete materials unless you're prepared to pay a heavy tariff. And, if the manuscript you provided was itself blurry or marked up, a printer can sometimes correct some problems but cannot work miracles.

After checking and approving the "proofs" as quickly as possible to prevent delays, return them to the printer. The next product you'll see is the completed "job." Some printers will store and/or ship bulk orders at low or no cost (aside from postal charges); if this service interests you, check the possibility with your printing supplier.

Audiovisuals

Every audiovisual (AV) effort starts with an idea. But you need to investigate whether the idea is best suited to a slide/tape (or filmstrip), a film, a set of transparencies with audio cassette, or a videotape. Don't move into production until you're reasonably certain that the audiovisual equipment needed to show the presentation will be readily available in places where you intend that it be used. At the same time, you must consider both whether your budget can afford a well-executed AV presentation and how you

* See Reference section, p. IV-94-95.

intend to make your AV materials available to the intended audience. If you plan to rent or sell the materials, what prices will you have to charge to cover loss, damage, shipping, packaging, and clerical time? Will your intended clients want to use your materials under these price conditions? If, on the other hand, you intend to loan the materials, can your budget cover inventory maintenance and repair costs, clerical time, shipping, etc.?

If this first investigation works out satisfactorily, your fledgling idea must be expanded, developed, and converted into a logical, effective series of visual and audible elements. Audiovisual materials just for the sake of having some sort of AV are wasteful and can, at times, detract from the effectiveness of a presentation. You should ask this question, "Will the AV presentation make the program more meaningful and easily understandable?" If that question is answered in the affirmative, then you can start planning for production.

Using Professional Help

Here you may need to assume the role of a "producer." For that role, you'll need sensitive judgment about what's effective and what's ineffective in both visual and auditory terms. But more than that is needed -- a bit of showmanship. Creating effective AV materials is not easy. Unless you have someone readily available who can advise you, this is another area where it is wise to seek consultant assistance. Look for someone who has both the technical and artistic qualifications and a keen sense of cost factors to advise you accordingly. You, or the AV production person you enlist to do the job for you, must be able to present the material you have in mind to the intended audience in exciting, convincing ways. (See Reference section, p. IV-97-98.)

First, with the AV consultant you're relying on, consider these questions:

- What makes your idea for an AV presentation exciting?
- If the idea were developed into an AV presentation, what (if anything) would viewers/hearers gain from it?
- What are your objectives in presenting this idea to them audiovisually?
- If you develop the idea into a presentation, what obvious production problems will you face?

Planning

Here are some ways of breaking down the production challenges into smaller tasks:

Audience: What group(s) do you want to reach? Where are they located?

Material Selection: Will the proposed content convey your idea(s) effectively? Do you have interesting content? How about visual content? Will both interest the audience you've identified?

Research: Do you have time to search out material you don't have on hand already? If not, can you find someone who can do that work for you?

Presentation Mode: What style of presentation do you have in mind? How long should the finished product be? Will the presentation be simple enough to assure effectiveness with most viewers?

Cost: What's the available budget? Have you obtained a rough cost estimate from the producer organization?

Script: Assuming you must write your own script, have you allowed time for others to review it? Do you have time for at least a prototype field test of the script? (The script becomes the key to production control and coordination from this point forward.)

Technical Resources: The AV specialist must tackle the technical challenges. Not only must that professional prepare your visuals, but she/he must also understand the ideas you want to convey through the particular items you're specifying. (Creative arts experience is helpful here, along with an ability to recognize quality in both pictures and sound.) The specialist aims to make the technical media work artistically for you by sensing the potentials and limitations of all production elements and of all the people involved. Talented people, working comfortably together in AV production, tend to create unified and interesting presentations.

Whatever AV components you do decide to produce, remember they're an integral part of your total package. Thus, consider carrying over any art motifs used in the printed materials. Cross reference your materials. Be sure that someone who receives a manual knows that your film or slides are available and how to secure them. Conversely, you may want to mention briefly your available written materials in the AV presentation.

Containers

Packaging of AV materials is rather simple until they are combined with print materials. Containers that fit AV materials and that are durable enough for mailing are readily available. For example, when shipping slides, look for clear plastic sheets such as "folio files" which have "windows" for slides and are punched for storage in a three-

Exhibit 11

Audiovisual Aids

Kind of Aid	Advantages	Disadvantages
FILMSTRIP	- Relatively inexpensive - Low reproduction cost - Familiar medium - Proper sequence is assured	- Strips are easily damaged by mechanical equipment - Limited application - Expensive to up-date
SLIDES	- Easy to up-date - Can be shown on variety of equipment - Individual slides can be used for different purposes	- Easy to lose individual slides - If mailed in "folio lites", must be loaded in carousel before use
FILM	- Most attractive to audience - Easiest to show mechanically	- Most expensive audiovisual medium - Requires high level of technical skill to produce
VIDEO TAPES	- Less expensive than film - Copies can be made very easily	- Equipment not readily available at all sites and is unfamiliar to many persons - High level of technical skill required to produce
OVERHEAD TRANSPARENCIES AND ENLARGED PHOTOS	- Useful in varied situations and for groups of various sizes - Easily shipped or transported - Less expensive to produce	Must be shown by skilled operator for most effective use

hole binder. Plastic containers with slots for a filmstrip and tape (or multiple sets) insure that the items will not become separated.

Container firms have also designed a variety of boxes that fit a combination of items: filmstrip and handbook, different sizes of handbook, film and guide, etc. Available containers (less expensive than specially designed ones) should dictate the number and type of AV materials you choose.

DISTRIBUTION

Distribution of your completed package, whether it be a single manual or a specially designed container with multiple components or something in between, involves a number of areas, including copyright/patent rights, pricing, inventory creation and maintenance, and billing/handling/shipping. Some of these tasks you may wish to carry out locally or contract for outside your school district, depending in part on school board policies and project capabilities. The following pages briefly touch on each of these subjects. In addition, some notions on "Seeking a Distributor" are included for those projects that don't intend to market their own packages.

Copyright/Patent Rights

Each state (and many a school district) has its own regulations and procedures for school district personnel who wish to copyright Federally-funded products. Federal guidelines, which prevail when funds flow from discretionary appropriations, suggest that copyright should be sought only when commercial publishers will later be invited to bid for production and/or distribution licensing under the Federal limited-term copyright procedures. Some school districts permit copyright in the name of the local Board of Education; others do not permit district staff to copyright anything produced in the district for sale to other educators.

In general, all Federally-supported materials are intended to remain in the public domain. That means anyone can duplicate copies of your uncopyrighted output without asking your permission. (For example, Educational Programs That Work, mentioned previously, was not copyrighted so that the information it contains would be disseminated as widely as possible.) But if you can advance some sound reasons why copyright will be necessary or desirable, without any remuneration accruing to the individuals who developed or wrote the materials, then a copyright may be obtained. (Incentives might include

integrity of project materials and/or recognition for the school district and its staff.)

If you wish to read the copyright guidelines as they pertain to your project, write:

Copyright Program Administrator
National Institute of Education
Washington, D.C. 20208
(202) 254-5928

If your project has developed tangible items that seem patentable, and if the school district wishes to assert its patent rights, you will need Federal approval (from the source above) before you consult a patent attorney.

When you create classroom or training materials, you must be very careful not to infringe on copyright held by authors or publishers of printed or recorded materials. Don't use recorded music to dress up an audio cassette unless it's original or public domain. Don't quote poetry unless you have written permission to do so from the copyright owner. Don't duplicate from copyrighted magazines or books or newspapers -- except for very short excerpts (100-200 words) and then give proper credit. A classroom teacher has some leeway in what may be duplicated for one-time in-class use, but your packaged product is subject to all applicable copyright restrictions. Exercise extreme care in your use of material your own staff did not specifically create. (See "Copyright Considerations" in Reference section, pp. IV-99-101.)

Also, if you use photographs, be sure you have obtained (parental) permission in writing for any person shown in the photos, lest you become embroiled later in an invasion-of-privacy action by an aggrieved (or opportunistic) family. (See Reference section pp. IV-102-103.)

Seeking a Distributor

Commercial distributors may show little or no interest in your product(s) because they may not foresee large enough revenues to cover their outlays in production and marketing and to allow an adequate profit margin. Some school districts that have licensed their products to commercial publishers have found that arrangement satisfactory. Others, however, have been concerned about alterations in their materials, promotional techniques, consultant help, or prices. Very few major school publishers have shown interest in school-developed programs. However, all publishers' names and addresses are shown in an annual soft-cover publication called Literary Market Place, which you can see at most public libraries or book stores. If you do arrange for commercial publication, expect that the price to users will be considerably higher than if a nonprofit organiza-

tion carried out the same tasks. Profitmaking organizations can be located through such trade organizations as:

Association of American Publishers
1 Park Ave.
New York City, N.Y. 10016

Educational Media Producers Council
3150 Spring St.
Fairfax, VA. 22030

Another profitmaking distribution mechanism worth investigation is Xerox University Microfilms (300 N. Zeeb Ave., Ann Arbor, MI. 48106), which is engaged in on-demand publication. However, you must pay a per-page fee to have your materials made available through this photocopying sales arrangement.

Finding nonprofit distribution organizations isn't easy. Most national professional organizations market only their own products. Regional laboratories do the same. But a number of nonprofit marketing-type operations already exist, such as:

Agency for Instructional Television (film, videotape)
Box A
Indianapolis, IN. 47401

Great Plains National ITV Library (film, videotape)
Box 80669
Lincoln, NB. 68501

Modern Talking Picture Service (film)
2323 New Hyde Park Rd.
New Hyde Park, N.Y. 11040

Anti-Defamation League (print, film - multiethnic orientation)
315 Lexington Ave.
New York City, N.Y. 10016

National Audiovisual Center (film, filmstrip, etc.)
National Archives & Records Service
Washington, D.C. 20409

Each of these organizations exhibits at national educational meetings, so you can consult with one of their representatives at such a gathering.

If your product focuses on the needs of the handicapped, you'll certainly want to investigate the distribution facilities of the National Center on Educational Media and Materials for the Handicapped, 220 W. 12 Ave., Columbus, OH. 43210 or the Council for Exceptional Children, 1920 Association Dr., Reston, VA. 22091.

There are also profitmaking wholesaling operations that might show interest, such as: Lakeshore Equipment Co., 19463 Phoebe Ave., La Mirada, CA. 90638, which has 11 locations, and Social Studies School Service, 10,000 Culver Blvd., Culver City, CA. 90230. You may

be able to find others by considering the agencies that try to sell educational or training materials to your school district.

Whether you enlist an external producing/distributing agency or keep the whole process inside your school district, the training, monitoring, and service functions will still remain a primary responsibility of project staff.

Pricing*

Your goal should be to assure that your materials, individually and as a total package, will be inexpensive enough to stimulate widespread adoption and use yet, when paid for, will provide enough revenue to cover the actual costs** incurred in distribution and in any future reprints to meet continued demand. Don't forget to allow for possible inflation when you make your calculations, though you can, of course, increase prices at a later date. Experienced diffusion projects caution that it is important to hold cost to the user low to insure widespread use of your materials. Unless your materials are easily obtainable, you may fail to achieve your diffusion goals.

Two concepts will underlie your attempts to set prices for materials so as not to earn a profit. One is fixed (or "plant") cost, the other variable (or "edition") cost. For most materials, Federal funds will presumably have covered many so-called fixed costs -- research, development, writing, editing, artwork, etc. That covers all the costs incurred prior to the beginning of reproduction in large quantity. (Refer to the Reference section, pp. IV-104-106, to see how School Volunteer Development Project priced its package.)

Variable costs are those associated with, and dependent upon, the quantity of copies produced for national distribution -- usually paper, printing, binding, collating, packaging, storing, shipping, billing, dubbing duplicate audiotapes from a master, reproducing filmstrip copies from a master negative, etc. The larger the quantity, the lower the unit cost. The larger the quantity, the lower the price to users. The larger the quantity, the higher the risk of having some inventory left unsold. The larger the quantity, the longer the interval before revisions can be incorporated and made available. All these contingencies must be considered in setting prices for your product(s).

* This section assumes you will be unable to supply your materials free for an indefinite period.

** See "Pricing" in Reference section, p. IV-104-106.

Distribution costs must be calculated as well: salaries for clerical labor, storage charges, wrapping and mailing materials, postage and freight costs, invoices, etc. Requiring prepayment will reduce your clerical costs dramatically. Though distribution costs are likely to remain relatively constant, note that multiple copies shipped to a single destination will cost you less per copy than single-copy order fulfillment.

You will need to make allowances for free (or courtesy) copies of some materials. Should you donate copies for goodwill purposes to school board members, key state education agency personnel, staff authors/developers, selected resource centers, etc.? How many copies will be needed in the field by linking agents or facilitators or trainers who work on your behalf? Will you be providing a few sets to each adopting site gratis or at a subsidized rate? How many sets (if any) does the school district require to spread your project to other local schools? All these copies will have an impact on your costs and should also affect pricing arrangements. (One project estimates that 4-5% of a print run is distributed gratis.) Materials used for field-test purposes should probably be priced below cost (e.g., charge only for paper and printing) or provided gratis. A developer figures that adding \$1.00 to the cost of manuals (which cost \$5.00 to print) covers costs of handling and postage. In some cases you may find that reprints may cost you considerably less. Selling the reprinted materials for the same price as the original inventory allows you to reduce unit costs in your overall production outlays.

The following pricing "tips" may be useful. (Refer also to the Unit Sales Price Worksheet and to the Reference section, pp. IV-104-106.)

- Other costs to watch closely: Handling incoming orders; handling complaints; specialized wrapping materials; special delivery charges; depositing checks and keeping records; inventory "shrinkage"; general and administrative expense. In any school district, you need to calculate these real costs with the business office before setting a price to users.
- If you establish a minimum quantity per order (say, 10 of each item must be ordered at one time), the order-processing cost becomes less burdensome. That's why bulk orders often receive some sort of discount; they're obviously more economical to handle.
- If you have multiple items in your project and each order will require picking items off shelves by hand, be sure to consider that difficulty in setting your price.

- Suppose you anticipate that your project will be obliged to close down at the end of its Federal funding. Then you need to consider what the school district policy may be about offering items for sale after the shutdown of the project itself.* Perhaps a local firm can be found to take over the product(s) at its own risk. Or perhaps the product(s) can be shifted to another comparable nonprofit agency willing to continue making them available.

Exhibit 12

Unit Sales Price Worksheet

Unit Title: Classroom Manual	
<u>Costs:</u>	
Reproduction *	\$ 2.50
Mailing envelope	.18
Storage	.02
Postage (book rate)	.17
Handling **	1.00
Inventory shrinkage factor	.20
Inflation factor	.20 (?)
Cost per unit:	\$ 4.27
Price per unit	\$ 4.50
* Includes cost of materials, reproduction, collating, punching, binding, etc.	
** Based on prepayment policy which eliminates billing and collection costs (and avoids nonpayment losses). Add 10% more if units are to be billed.	

Remember that all revenue you receive is subject to Federal regulations (e.g., grant-related income; royalty sharing; etc.). Your plans for use of such funds must be different depending on whether you are covered 100% by Federal funds or are now operating with school-district support while distributing products/processes developed with Federal funds. Under certain conditions revenue may be used by the project if the use is consistent with the Federal legislation which led to your development work. Be sure to check with your district's business officer, your Federal project monitor and contracts officer,

* Some school district accounting procedures may preclude expenditures (e.g., production outlays) in one fiscal year when offsetting income is not anticipated until the following year. It's wise to check in advance.

and/or senior contracts personnel in the DHEW Regional Office* before you develop and sell any products or training. This planning is essential to assure proper use of project funds.

The following Package Distribution Worksheet is provided as a starting point to help you plan for free or below cost copies you may want to supply. (Entry information is for illustration only.) Some of these categories may not concern you; you may identify others not cited who would be important recipients of your materials. Get as much mileage as possible out of every free copy.

Exhibit 13

Package Distribution Worksheet

Item: Classroom Manual		
Recipients	Number of Copies**	
	Gratis	Below Cost
Superintendent and Central Staff	5	
District Library	2	
Project Staff	10	
School Board	12	
Project's Advisory Board	15	
Samples to Adopters, Conference Copies, etc.	50	50
Principals in Project Schools	20	
Federal Project Monitor	2	
State Title I/IV Coordinator	4	
Area Intermediate Agencies	2	20
State Facilitators (NDN)	65	200
Other Linkage Agents		50
Press Copies	25	
Visiting Dignitaries	20	
Field Testing	10	20
Total	242	340

* Refer to Title 45 of the Code of Federal Regulations, parts 100a and 100b, published in the Federal Register on Nov. 6, 1973. (Consult your public library for a copy.) Program income is covered in 100a, subpart M. Section 100a.232 focuses on interest income; 100a.233 covers sales of real and personal property; 100a.234 deals with royalties; and 100a.235 tells you about "other" program income.

** Your Federal contract may require certain distributions (by negotiation). However, you can be selective; all components (e.g., AV) may not be needed by all recipients.

Inventory Creation/Maintenance

Your first print run, frankly, will probably be a guess, but aim for as accurate a guess as you can conjure up. Until you actually work with adopters and start to sense the actual demand for your materials, all estimates will prove difficult. But talk to your State Facilitator and to one or two other exemplary projects that market to the same audience (i.e., early childhood, secondary social studies, etc.) and that have distributed materials for several years. They may be able to offer some guidance. And once you have created an inventory, keep careful records to learn how sales fluctuate and to gauge the demand for gratis copies.

Meanwhile, fill out a worksheet like the following to narrow your estimate to reasonable numbers. (Entry information is for illustration only.)

Exhibit 14

First-Year Production Estimate Worksheet

Item: Classroom Manual	
Distribution Method	Quantity 1st Year
<u>Gratis or Below Cost</u>	580 *
<u>Projected Sales (Full price)</u>	
School Districts	300
Universities/Libraries	120
State Agencies/Intermediate Agencies	40
General Public	75
Miscellaneous	100
Total Units	1,215
* See breakdown, p. III-31.	

As discussed elsewhere, consumables (e.g., student worksheets, tests) that can't be duplicated at adopting sites must be produced in sufficient quantity to cover (for example) one year's requirements. Wherever possible, offer spirit masters or mimeograph stencils (for longer runs) so that adopters can do their own duplicating.

Items used in multiple fashion (e.g., teacher or aide handbooks) call for runs large enough to cover the number of trainees anticipated during the diffusion period.

Be sure you've planned adequate inventory to cover replacement needs for individual items likely to be heavily used (or easily misplaced), as well as items you're willing to sell to non-adopters for reference or adaptation purposes.

No matter how securely you store your product inventory, some shrinkage will occur. Some samples will be pulled to show to visitors and will then mysteriously not find their way back onto the shelves. Some components will disappear in transit and need to be replaced. Some components will be lost or destroyed at user sites or during training sessions, and back-up quantities will be needed. However, you can minimize this shrinkage by assigning to one person all inventory control responsibilities and locating materials near your offices under lock and key.*

You can, of course, obtain fire and casualty insurance, and you may be able to tack on theft or damage coverage, at least to cover replacement value. But you should probably add a small shrinkage factor when planning prices to users.

Also, plan for any promotional materials needed for implementation and adopter-site public information purposes. Some of these items undoubtedly will be part of your package. For example, your package might contain an awareness handout for parents (to be reproduced locally), a press release describing the project for local media, a brief project description for non-project personnel in an adopting district, as well as orientation materials to help recruit teachers, aides, professionals, tutors, volunteers, etc.

In addition, you'll need display and awareness materials for your own promotional efforts and for those carried out by linking agents, as well as adoption and order forms to carry out your diffusion plan. Printing economies in producing these items will pay handsomely in terms of stretching your budget further.

To signal the time for reprinting, you should insert a color divider (or "flag") at a point in the inventory of each component where reordering seems prudent. Don't wait until all your handbooks have been sold/used before scheduling a reprint. By calculating average monthly rate of sale/use, you can be ready with fresh inventory just about the time the last piece from the current supply is being packed for shipment. Since materials fade in sunlight and are damaged by dampness, be sure you store all the materials you

* A convention exhibit is the time when materials disappear most quickly. Put out for display only what you can afford to lose; don't leave materials unguarded. Clearly identify items as display materials but be prepared to suffer some loss no matter what precautions you take.

produce in a clean, dry, protected location, well away from water or heat pipes. Also consider the possibility that adopters will later want to reorder copies of selected items. How will these be stored for easy order-picking as orders arrive? How will they be shipped?

Don't forget to include in your package an inventory list as well as reorder information for consumable items.

Order Processing/Billing/Handling

If your district is willing and able to handle this time-consuming work for your project, you need only determine what service charge the business manager will add to each order.* If all orders must be accompanied by prepayment in full, then no collection procedures will be required. Most projects follow a prepayment-required policy. (Some educational agencies are notoriously slow in paying their bills; however, colleges and public school districts tend to be excellent credit risks since they usually have public funds.)

You need to decide in advance your selling terms. Who pays for insurance (if any)? Who pays for postage or delivery charges? Is there a special charge for handling small or special or rush orders? Is AV rented or sold? If open-account billing is offered, is a cash discount offered for payment within 10 days (or more) of receipt of invoice?

What invoice forms are available or need to be printed? Who will handle audit and accounting? What credit provisions are made for replacement of missing or imperfect items, for returned merchandise, or for nonreceipt of shipment?

These questions are raised so that your school district can decide if it wants to enter so complex a "business" operation. The business office might prefer to assign the entire set of tasks to an outside agent under contract. Another nearby nonprofit agency may be willing to assume all these tasks and simply bill you monthly for work actually performed. Or you may be able to locate a commercial order-processing (often called fulfillment) and shipping firm that would be willing to bid for this new business.

* In the commercial sector, the one-time (per order) costs associated with order processing and billing procedures in 1976 ran to \$15 per line item (that is, whether the item was a \$1 pamphlet or 300 copies of a single text).

Shipping

When you're ready to ship your materials, a number of channels are available. Those most often used include: the U.S. Postal Service, United Parcel Service, and Greyhound Package Express. The United States Postal Service publishes a handy booklet, Mailers Guide, (as well as other brochures) containing such information as differences in cost and delivery among different classes of mail, sizes and weights of allowable packages, etc. You'll find many different ways to save on postage costs. Check bulk mailing regulations before sending out awareness materials. In addition to reading the guide and other available brochures, contact your local central post office and spend some time with a service representative; discuss all postal alternatives before you decide on your final packaging container.

United Parcel Service (UPS) delivers packages to any address in the 48 continental states. Unlike the Postal Service (except for certain priority classes of mail), UPS sets general minimum standards for parcel delivery. For example, within 150 miles, delivery is made by the next business day; 1500 miles takes four days. Rate charts for Blue Label (air service to certain states), surface out-of-state delivery, and local zone delivery are available upon request. Note that packages may not exceed 50 pounds. All packages are automatically insured for \$100; additional insurance is available. Pick-up service at your door is available in many locales. Should your package be delayed or lost, UPS can track it quite efficiently.

Greyhound also sets size and weight limits on their packages and delivers anywhere where passengers are bussed (including Canada). In most major cities, shipments can be picked up at your door and delivered directly to the receiver. A readily available Bus Station List indicates cities served; other charts indicate prices.

In addition to the above services, most airlines also handle shipments and have special services for high priority parcels; also check air freight services. If your area is serviced by a train system, check their shipment services. And don't forget to look into other smaller agencies in your area that may handle in-state or regional deliveries.

REFERENCES

Note: Grouped in this "appendix" you will find a number of documents that can prove helpful in your packaging effort. This collection is neither comprehensive nor final; we invite suggestions from early users as to other items that might be incorporated here if the Office of Education should, at some future date, decide to revise and reissue this manual. Also note that this draft uses few illustrations. Any user with ideas for effective illustrative line drawings is invited to submit artwork for the final version. Please mail such items to: Fred Rosenau, Far West Laboratory, 1855 Folsom St., San Francisco, CA. 94103.

Caution: Some documents in this section have been reproduced from imperfect "masters." In the interest of economy during production of this draft, materials were not retyped to fit this handbook's style.

A

JOINT DISSEMINATION REVIEW PANEL (JDRP)

The Education Division of the Department of Health, Education and Welfare released these guidelines in the Fall of 1976. Developers of educational programs should read this information carefully if they hope to qualify for diffusion funding support at the Federal level. Interested educators are invited to attend Panel sessions held in Washington, D.C., approximately every other month. For further information contact: Chairperson, JDRP, c/o Assistant Secretary for Education, DHEW, FOB 6, Room 3011, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

Information on state-level validation procedures may be obtained from the ESEA Title I or IV-C offices in any state education agency.

10/15/76

THE EDUCATION DIVISION'S JOINT DISSEMINATION REVIEW PANEL (JDRP)

PURPOSE, PROCEDURES & CRITERIA

* Background and Purpose:

Congress and educators expect the Federal Government to disseminate products, materials, practices, and methods to improve the educational quality of American schools. Numerous pieces of legislation have stressed this responsibility of the Office of Education and the National Institute of Education. Various efforts have been made over the years to discharge it.

Eagerness on the part of Federal officials to disseminate exemplary educational methods has not always been matched by assurance that the items disseminated were in fact exemplary. Federal program staffs have disseminated materials which seemed innovative, intriguing, or which enjoyed a good reputation in the schools where they were utilized. Seldom was it determined that such products were supported by objective evidence of effectiveness. State and local educators have been persuaded by Federal sponsorship to implement practices which have not produced their promised results.

The Federal Government is irresponsible if it does not take steps to assure that the educational materials it disseminates are backed by objective evidence of effectiveness. The Education Division thus has established a Joint (OE and NIE) Dissemination Review Panel to review evidence of effectiveness of potential exemplary products and practices developed with funds provided by either agency. The joint OE/NIE Panel insures that the two agencies apply the same criteria for assessing effectiveness prior to Federal dissemination.

The Panel serves as one of the internal quality control mechanisms for the dissemination activities of the Education Division. The Panel is not intended in any way to pass on or constrain the dissemination activities of State and local school agencies. It acts as a self-restraining mechanism by which the Education Division facilitates informed local choice. Through the Panel, when an Education Division program office, representing the Federal Government, says that some particular educational practice or product is exemplary and is worthy of implementation by school systems, the assertion will have something substantial behind it.

° Operations:

The Panel reviews all products/materials and practices/methods proposed for dissemination by any Education Division program office. Panel review is required before any Education Division program office can approve use of Federal funds for the dissemination of any practices or products for which claims of effectiveness are made. In addition, review is required for other, no-cost activities involving Education Division endorsement of or advocacy for a product or practice for which claims of effectiveness are made. The review is intended to insure that dissemination of materials/practices are supported by objective evidence of effectiveness.

"Products" and "materials" refer to transportable, tangible or packaged programs or practices such as curriculum materials, educational management systems, computer programs, staff training materials, guides, models, administrative procedures, Project Information Packages (PIPS), etc. "Practices" and "methods" refer to systematic programs, procedures or techniques whose adoption or adaption requires assistance from the originators or their representatives.

The Panel does not recommend or review any proposed dissemination strategies. A Panel decision that the evidence of effectiveness is compelling may not be the only review prior to dissemination. In addition, the decisions on how to disseminate Panel reviewed products or practices are left to the sponsoring agencies and programs in the Education Division. It is possible for one Education Division program to submit and another program to disseminate.

The Panel (and its predecessor unit, the OE Dissemination Review Panel) has existed for three years.* It has met over 60 times, reviewed over 280 submissions, and approved about 55% of them for dissemination. In many cases, items not favorably received at the initial review are resubmitted with additional information supporting their evidence of effectiveness.

° Composition:

The Panel is composed of 22 members appointed by the Commissioner of Education and the Director of NIE. Members are selected on the basis of their ability to analyze evaluation-based evidence on the

*This present document is designed to update a November 1974 statement on "The Office of Education's Dissemination Review Panel: Procedures and Criteria".

effectiveness of products and practices, and on their experience in education generally. The Panel meets periodically to review submissions from Education Division programs (not from SEA's, LEA's, or other outside organizations).

° Submissions:

As noted above, the Panel is one device for upgrading the quality of Education Division's dissemination activities, not a self-appointed national approval body. The Form for Submitting Material has been developed for Education Division programs to bring together evidence of the effectiveness of products or practices to the Panel. This form calls for a brief description of each product or practice (including cautions relating to its use), assurances and claims about the product or practice and how it was tested, and a summary of the evidence supporting claims of effectiveness. This material is verified for factual accuracy by the submitting Federal program before review by the Panel.

° Procedures for Submission and Review

A. Education Division Agency or Program Responsibilities Prior to Panel Review

1. Identify potential products* or practices* which the Federal program may want to state or imply are effective, exemplary, promising or worthy of dissemination support. Panel review is not required for catalogues and purely descriptive lists where there is no claim of effectiveness made and no recommendation of adoption.
2. Pre-review the claims of effectiveness for factual accuracy. Pre-review for social fairness and with respect to possible harm to users also is required. The agency or program may employ additional criteria such as quality of development, user enthusiasm, conceptual soundness, etc.

* As of January 1976, such products or practices must have been developed by Federally supported programs, but may be copyrighted and published commercially. The Education Division Dissemination Policy Council, following comments from various groups, has decided that proprietary material not developed with Federal funds will not be reviewed by the Panel unless Federal support for their dissemination is sought.

3. Select products or practices for submission to the Panel on the basis of favorable pre-reviews.
4. Prepare (with the assistance, if necessary, of the producers, users, or evaluators of products or practices selected in step 3 above) submissions according to these guidelines and the attached forms. Since the written submissions are the principal basis of the panel's judgments, it is important that this information be clear and complete. The required pre-submission reviews for accuracy and completeness should have been completed by the program staff. The maximum permissible length of material to cover each submission is ten single-spaced typed pages including tables. The most important section, of course, is that summarizing the evidence of effectiveness. But the guidelines and form for submitting materials (attached) also require a brief but specific description of the product or practice and data on learner costs so that the Panel can consider the educational significance relative to the effort and costs required.
5. Submit individual products and practices separately, if they are to be used separately and if they are supported by different types of evidence.
6. Prepare a memorandum of transmittal signed by a Deputy Commissioner or Associate Director which states that the submission has been pre-reviewed and, to the best of his or her knowledge, is factually correct and that the products or practices are socially fair and apparently not harmful.
7. Submit 12 copies of the transmittal memorandum and each submission to the Recording Secretary of the Panel at the Office of the Assistant Secretary for Education.
8. Arrange for a representative of the OE or NIE program office making the submission to be present at the meeting. The representative should be qualified to answer any questions the Panel may have about the proposals. Program Offices may find it useful to have the assistance of evaluation, development or user staff. The Panel encourages but does not require continuation of this practice. It should be emphasized that the submission is from the Education Division program office, not from the developer, evaluator or user of the product or practice. The Division Officer thus is directly responsible for providing information on the submission at the Panel meeting.

8. JDRP Review Activities:

1. The Chairperson of the Panel will schedule a meeting to review submissions. The date of the meeting will normally allow the Panel Members five working days to review each submission.
2. All Panel meetings are open to the public.
3. Clarifying questions may be put to the Education Division program representatives, developers and evaluators by Panel members. A vote is taken on whether there is adequate evidence of effectiveness.
4. Seven members including at least three members from each participating agency constitute a quorum (no substitutes).
5. Voting will be by closed ballot, but the votes of the individual Panel Members are announced by the Chairperson or the Recording Secretary after each vote has been completed.
6. Panel members disqualify themselves from voting on submissions made by programs in which they are directly involved.
7. A simple majority is required for a Panel decision that the evidence of effectiveness is convincing. A tie vote means a decision that the evidence is not convincing.

C. Follow-up Activities after Panel Review

1. Products or practices not favorably reviewed by the Panel may be resubmitted at any time.
2. The minutes from each meeting are distributed to all Panel Members, OE Deputy Commissioners, and NIE Associate Directors.
3. Agencies or programs are responsible for maintaining files or publishing catalogues of approved submissions. Currently a catalogue of all JDRP approved submissions is maintained by the U.S.O.E. Division of Educational Replication, Bureau of Elementary and Secondary Education.
4. Education Division Program Offices may endorse or support the dissemination of products or practices favorably reviewed by JDRP. Some offices do not have further reviews. Other offices require further product quality review before dissemination.

° JDRP Criteria for Judging Effectiveness

The Joint Dissemination Review Panel has received requests for a statement of the "cutting points" on the criteria used in reviewing projects. The Panel has been unwilling to set forth precise specifications. The decision as to whether the evidence of effectiveness on any particular product or practice is adequate to justify use of Federal funds to promote dissemination is not automatic or mechanical. This decision involves judgment about the educational significance of the claimed effect and the credibility of the evidence supporting the claimed results. A decision that the evidence is not convincing is usually not due to a single fatal flaw, but to a failure of plausibility on several criteria.

The Panel believes that setting up highly specific standards relating to educational significance (e.g., the importance, number, magnitude, durability and consistency of positive effects and their comparative advantage) and credibility of the supporting evidence (e.g., objectivity, reliability, validity, generalizability and causal nature of the data) would degrade rather than improve the review process. The Panel has felt, for example, that it would be irresponsible to assert that projects achieving a gain of 1.0 grade equivalent units should be accepted while a gain of 0.9 grade equivalent units should be rejected; or that a sample size of, say, 50 is acceptable, whereas a sample size of 49 is not.

It is because a complex judgment on plausibility which takes into account all the evidence is required, that the Joint Dissemination Review Panel is needed. Past history has indicated that leaving the judgment of what is acceptable up to each Education Division program produces variable and questionable results. On the other hand, developing a manual of boiler plate standards would entail the arbitrariness cited above.

° Some Guidance:

All this may be true, but acknowledging it may not provide the guidance which Education Division program staffs need in order to identify products or practices which have a high likelihood of being approved. The following guidance is intended to amplify the short statement in the attached Form for Submitting Materials to the Joint Dissemination Review Panel.

The purpose of this section is to set forth in a general way, but in greater detail than is furnished in the JDRP Submission Form the kinds of criteria the Panel uses in assessing the effectiveness of the products or practices submitted to it. This should provide program

staffs with better guidance for selecting potential exemplary materials and methods, and preparing submissions to the Panel.

Many of the products and practices submitted to the Panel have been in the areas of compensatory education, environmental education, reading, math, bilingual education, and other similar cognitive, achievement or affective gain in individual elementary and secondary students. The criteria discussed below as illustrative relate mainly to these kinds of submissions.

Perhaps the best way of making clear the kinds of criteria the Panel uses in reaching its judgments on effectiveness is to set forth a series of general, almost common sense questions.

The questions focus on three issues. These are (1) is there evidence that anything important happened that is consistent with the stated claims, (2) that what happened is generalizable, and (3) can this credibly be attributed to the product or practice?

1. How well did the children perform before they were subject to the product or practice in question, and how well did they perform after experiencing it? As an example, are there measures taken before and after the children experienced the product which show that they gained or improved?
2. Are the gains statistically reliable?
3. If there is evidence of change or improvement, is the gain large enough to be meaningful? That is, is it large enough to be both statistically reliable and educationally significant? Many submissions submitted to the panel do show apparent before-after mean changes in the expected direction, but they are either not statistically reliable or, even if statistically reliable, are too small in size to constitute meaningful educational improvement judged against commonly available experience.
4. Is there evidence that the improvements registered by the product or practice are stable and generalizable to other school settings? Or does it appear that they may be the result of special characteristics of the particular group of students who happened to use the product or practice when it was evaluated or the unusual competence of the teacher who used it. These considerations are acute when the number of children is small or where there is only a single use of the product, e.g., where the evidence is based on one teacher and one classroom. Thus, it is desirable when the number of cases is small, for there to have been multiple replications of the practice (e.g., different classrooms, different teachers, different schools, or different years).

5. Once it has been established that there have been gains, that they are large enough to be statistically and educationally meaningful, and that they are generalizable beyond the originating site, the central question remains: can we be reasonably confident that the gains can be attributed to the product or practice described in the submission rather than to normal maturation, the regular education process, or other special factors which may be impacting on the students? In order to provide some kind of answer to this crucially important question, submissions to the Panel should include some measure or estimate of what would have happened to the children if they had not been using the product or practice. The best way to do this, of course, is through a control group, but the Panel has approved many projects which did not contain a control group because the evidence of effectiveness contained some other persuasive measure or estimate of the effects of non-treatment. For example, comparisons of recent gains with previous year's scores or national norms often provide very persuasive evidence that the unusually large gains recorded can reasonably be attributed to the product or practice. Another example is time series comparisons against a baseline time period. In many cases, however, simple before-after data on the user groups are likely to be ambiguous when there are no parallel data on a comparable, untreated control group.

The idea is to provide evidence ruling out rival hypotheses (factors which may be responsible for producing the effects attributed to the product or practice). Examples of rival hypotheses are:

- ° maturation -- psychological or physiological changes in the users.
- ° history -- events or administrative procedures which occurred in addition to the product or practice.
- ° selection/differential attrition -- when comparison groups are unequal on the relevant measures at the beginning (due to selection) or at the end (due to differential attrition).
- ° statistical regression -- e.g., when groups which are selected for their initial extreme scores on a given measure fall closer to their population mean score on retesting with the same measure.
- ° test effects -- increases in test scores due to the learning that results from frequent use of the same test, or to teaching to the test.

These are the main criteria by which the Panel tries to assess the evidence of effectiveness presented for products or practices. It is not possible to specify the precise point on any of these criteria which categorically differentiates acceptable from unacceptable submissions. Using all these criteria and examining all the evidence, the Panel tries to render judgments which, on the one hand, will screen out those submissions where the evidence of effectiveness is not strong enough to support a Federally funded dissemination effort, and on the other, will insure that those products and practices where there is such evidence, get moved into a wider process of dissemination which ultimately can improve education.

° Other Kinds of Outcomes:

It was noted above that these criteria apply most appropriately to products and practices directed at improving the achievement of elementary and secondary children. The criteria discussed above would in many cases be quite inappropriate. The Education Division carries out a much wider variety of educational activities. Some activities seek to change attitudes or impart information. Others are aimed at bringing about changes in institutional procedures, persuading State and local governments to adopt certain techniques, or altering the ways in which state or local monies are spent. Still others seek to expand the pool of competent educational practitioners through innovations in in-service or pre-service training.

In all these cases, quite different outcome measures and evidence of effectiveness will be required. However, the same general logic implicit in the questions listed above apply to these products and practices as well: Is there persuasive, objective evidence that things are different after using the product or practice than they were before? And can we be reasonably confident that any such changes or improvements noted can be attributed to the effects of the item described rather than something else?

- ° The Panel reviews primarily evidence of effectiveness but it is concerned with other issues: JDRP primary responsibility is to judge the effectiveness of submitted products or practices. It also serves as an additional opportunity to assure that other screening criteria which are the responsibilities of the Education Division's programs are met. As discussed in the first two sections of this paper, the Panel is concerned that the products or practices whose

effectiveness is to be reviewed are clearly identified; that common implementation problems are described and that full start-up and operating costs are presented, so that schools interested in selecting the item will not do so under any mis-impression about its costs. Other Federal concerns include social fairness and possible harm to users.

Many other concerns for "good" products have been suggested. These include the conceptual soundness of the product or practice, the quality of the developmental process, acceptance by educators, the uniqueness of the submissions, how professional the materials look, and enthusiasm of parents and students.

The Panel regards these as important. Program offices are encouraged to pre-review project submissions to the Panel on all such criteria. Nonetheless, the Panel's sole function is to review only one category of criteria that may be considered before dissemination: evidence of effectiveness. This may be considered a fairly large task by itself. Adopters should recognize, however, that JDRP only decides whether persuasive evidence of effectiveness consistent with the claims and goals has been presented. The product does not have a "universal seal of approval" from the Federal government, because that is not the Panel's function.

SUGGESTIONS FOR FURTHER READING

G. Kasten Tallmadge, Donald P. Horst and Christine T. Wood,
A Practical Guide to Measuring Project Impact on Student Achievement.
Superintendent of Documents, Government Printing Office, Washington,
D.C. Stock Number 017-080-0146, \$1.90.

G. Kasten Tallmadge and Donald P. Horst, A Procedural Guide for
Validating Achievement Gains in Educational Projects, Superintendent
of Documents, Government Printing Office, Washington, D.C. 20402,
\$2.10.

TRANSMITTAL MEMO FORM

TO : _____ Chairperson, JDRP
THROUGH: _____

FROM : _____
SUBJECT: _____

Submitted for Review by Joint Dissemination Review Panel

The attached submission is forwarded for review. The submission is factually accurate. I also affirm that the products or practices described in the submission have been favorably reviewed for social fairness (e.g., fairness with regard to sex, race, religion or occupation) and have been examined with respect to possible harm to users. Limitations, if any, as to fairness or possible harm are noted in the submission.

Information on other pre-review criteria applied by my office prior to JDRP submission is attached.

Upon completion of JDRP review, please send a copy of the minutes of the meeting to:

Name

Street

City and State

Zip Code

10/12/76

FORM FOR SUBMITTING MATERIALS TO THE
JOINT DISSEMINATION REVIEW PANEL

PROGRAM AREA: (e.g., Title III, reading, career education, environmental education, education for the handicapped)

- I. TITLE OF PRODUCT OR PRACTICE TO BE REVIEWED:
- II. WHO DEVELOPED THE PRODUCT OR PRACTICE:
- III. SOURCE AND LEVEL OF FUNDING:
- IV. YEARS DURING WHICH THE PRODUCT OR PRACTICE WAS BEING DEVELOPED OR TESTED:
- V. BRIEF DESCRIPTION OF THE PRODUCT OR PRACTICE FOR WHICH CLAIMS OF EFFECTIVENESS ARE BEING MADE AND THE DATA:

What is the product or practice?

What claims of effectiveness are being made?

Who are the intended users and beneficiaries?

Characteristics of the groups on which the product or practice was developed and tested.

Costs for adoption of the product or practice (See table on p. 2)

Interpretability of the quantitative measures: Evidence that the measures are reliable and valid as indicators of the effects claimed.

Credibility of evidence: who collected and analyzed the data? What assurances are there that the findings are objective?

VI. EVIDENCE OF EFFECTIVENESS:

1. Evidence that something happened: What is the evidence that something happened?
2. Evidence of statistical reliability of the effects: What is the evidence that whatever happened, happened often enough and with sufficient reliability to be likely to happen again under similar circumstances?
3. Evidence that the effects are educationally meaningful: What is the evidence that the effects are large enough, powerful enough, or important enough to be educationally meaningful, regardless of the statistical wonders performed?

4. Evidence of generalizability to the populations for which the product or practice is intended: Evidence that the product or practice has been tested widely enough and under sufficiently diverse circumstances to give assurance that the effects claimed may be similar when the product or practice is used elsewhere for the populations intended.
5. Evidence that the effects are attributable to the product or practice and that rival hypotheses (such as maturation, practice effects, etc.) are ruled out? In order to be convincing, the evaluation need not be a strict experimental design, although this type of evidence is desirable. However, there must be some kind of high quality, objective, methodologically sound, quantitative evidence demonstrating that the product and practice in question is effective and superior to other, more commonly used methods or approaches, and that the effects are caused by the product or practice.

VII. COST INFORMATION PER LEARNER TABLE SHELL

	INSTALLATION Non-recurring Costs	SUBSEQUENT YEARS (Recurring Costs)
Staff Training		
Special Facilities		
Equipment		
Consumables		
Other Costs		
TOTAL COSTS		

B

NATIONAL DIFFUSION NETWORK (NDN)

The following reproduction of one side of a small folder describes the Office of Education's diffusion system as it existed in 1976. Current information on the National Diffusion Network may be obtained from: Dr. Lee E. Wickline, Director, Division of Educational Replication, Bureau of Elementary & Secondary Education, U. S. Office of Education, ROB 3, Room 3616, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

The folder itself represents one example of an inexpensive and reproducible awareness brochure.

NDN

EXEMPLARY EDUCATION PROGRAMS

More than 130 exemplary education programs, developed with federal funds over the past ten years, are now available to you — at a fraction of the cost it took to develop them. Each program was designed and tested by educators in day-to-day use with students in local school districts.

Moreover, a special review panel of the Education Division of the Department of Health, Education and Welfare has evaluated each program and found it educationally effective and worthy of diffusion in other school districts. Now, USOE's National Diffusion Network can help you match your needs with an educational program that works — whether the program is located in your own state, or far across the country.

The programs not only can provide answers to your educational problems but can give you a *choice of answers*. You make the choice. You pick the program that best suits the needs of your district in terms of your goals, the students you serve, the structure of your community, your staff, use of facilities and materials, and local cost factors.

Best of all, you can find out all about any program *before* you make a commitment to try it. You will learn the amount and type of training needed by teachers and other staff to initiate the program, the time needed to get the program underway, additional facilities and materials required (if any), and program costs each step of the way.

No longer do you have to search on a hit-or-miss basis for a program that works. No longer do you have to go it alone in finding the exact program to fit your particular needs or in getting it installed successfully in your school district.

HOW CAN YOU GET HELP?

Simple. Turn to NDN — the National Diffusion Network. USOE established the Network to enable you to draw on teamwork instead of guesswork in solving your big educational problems. NDN links you to some of the most successful education programs in the country.

NDN links together:



Local school districts searching for answers to educational problems.



The developer/demonstrators of exemplary programs who usually can provide you with information, materials, training, advice — and follow through, if you decide to adopt one or more of their programs in your school district.



State facilitators — persons located in most states who are specifically funded by USOE to give you personal attention, to help you match your needs with the most appropriate exemplary projects, to give you technical assistance and advice — in other words, to assist you in finding and adopting the most appropriate program to meet your needs from among the 130 exemplary projects.

HOW HAS NDN HELPED SCHOOLS?

Although a new organization on the national scene, NDN's track record in carrying out its task of assisting local school districts is noteworthy. For example, one Illinois project trained 1,500 persons in one year in the early prevention of school failure; a New Jersey project has improved education for 45,000 secondary students all across the country; an Ohio project focusing on awareness and sensitivity techniques has trained more than 1,000 teachers, given workshops in 450 school districts across the country, and enabled 85 school districts in 16 states to replicate its education program successfully.

WHAT KINDS OF PROJECTS ARE INCLUDED IN NDN?

All kinds. NDN offers a wide array of early childhood and pre-school programs. 30 programs in secondary education, many programs for students needing specialized help, individualized instruction, or individual attention. Students of every socioeconomic background in both elementary and secondary schools have learned to read, compute, write and spell better by using the various processes and materials produced by the projects.

Other exemplary projects have developed specialized curriculum and instruction in environmental education, bilingual education, arts education, and career education.

The projects were funded by USOE to package a locally developed product or process, to carry out demonstrations, to provide training for adopting school staffs, to monitor installations at sites all across the nation. In other words, their mission is to give you information and help. The State Facilitator can link you with any of the Developer/Demonstrator Projects anywhere in the country.



HOW ABOUT VISITING ONE OF THE PROGRAMS?

Easy. You can arrange a visit to the program of your choice by contacting the project director or your state facilitator. In fact, USOE has designated 65 of the exemplary programs as "Developer/Demonstrator Projects"; these projects are located from Connecticut to California, from Minnesota to Florida.

C

MARKET SEGMENTATION

This brief description suggests a method primarily used by commercial marketers but increasingly being adopted by nonprofit groups to reach specific audiences. Market segmentation increases the likelihood that diffusion efforts will meet the needs of those most likely to use the offered services.

MARKET SEGMENTATION

There are many educational audiences. Among those that you're likely to plan to reach are:

- Learners (K-12; adult; etc. - by level)
- Teachers, aides, tutors
- Resource staff
- Administrators (building and district)
- State and Federal education agency staff
- Postsecondary trainers and consultants
- Parents
- School boards
- ... etc.

Market segmentation is a technique that can help you focus your planning and development efforts, especially as you look ahead to distribution of your final package.

Here's one example of market segmentation (i.e., targeting). The Early Childhood Preventive Curriculum Project (a program designed to help high-risk first grade pupils) in Florida looked at its in-state market this way:

Florida elementary and secondary schools	1,945
Only elementary	1,458
Only with 1st grade of at least 100 pupils	544
Only those with 18+ pupils retained in 1st grade for at least three consecutive years	92
Thus <u>potential adopters</u> would number:	92

This type of planning is often called "market segmentation" by planners in marketing. (See, for example, Chapter 16 in Marketing Manager's Handbook, edited by S. H. Britt, Dartnell, 1973, for additional information on this topic.)

With this kind of pre-planning a project would find itself able to estimate:

- The total national (or state or regional) market for its product(s) and services.
- The number of persons likely to adopt/adapt its exemplary program.
- The quantity of awareness and training materials that will be required to meet market demand.
- The time commitments of training and other staff members.
- The inventory of "packages" needed for the year ahead.

Staff in state education offices, State Facilitator projects, and intermediate service agencies can provide information to help you in this kind of diffusion planning.

D

LEVELS OF USE

This chart diagnoses concisely a view of the adoption process in education. Review it before you finally decide on the key components needed in your diffusion package. (See "A Framework for Analyzing Innovation Adoption" by Gene Hall, et al., Journal of Teacher Education, 1975, 26(1), 52-56 for additional details.)

LEVELS OF USE
SCALE POINT
DEFINITIONS OF THE
LEVELS OF USE
OF THE INNOVATION

Levels of Use are distinct states that represent observably different types of behavior and patterns of innovation use as exhibited by individuals and groups. These levels characterize a user's development in acquiring new skills and varying use of the innovation. Each level encompasses a range of behaviors, but is limited by a set of identifiable Decision Points. For descriptive purposes, each level is defined by seven categories.

LEVEL 0
NON-USE: State in which the user has little or no knowledge of the innovation, no involvement with the innovation, and is doing nothing toward becoming involved.

DECISION POINT A

LEVEL I
ORIENTATION: State in which the user has acquired or is acquiring information about the innovation and/or has explored or is exploring its value orientation and its demands upon user and user system.

DECISION POINT B

LEVEL II
PREPARATION: State in which the user is preparing for first use of the innovation.

DECISION POINT C

LEVEL III
MECHANICAL USE: State in which the user focuses most effort on the short-term, day-to-day use of the innovation with little time for reflection. Changes in use are made more to meet user needs than client needs. The user is primarily engaged in a stepwise attempt to master the tasks required to use the innovation, often resulting in disjointed and superficial use.

DECISION POINT D-1

LEVEL IV A
ROUTINE: Use of the innovation is stabilized. Few if any changes are being made in ongoing use. Little preparation or thought is being given to improving innovation use or its consequences.

DECISION POINT D-2

LEVEL IV B
REFINEMENT: State in which the user varies the use of the innovation to increase the impact on clients within immediate sphere of influence. Variations are based on knowledge of both short- and long-term consequences for clients.

DECISION POINT E

LEVEL V
INTEGRATION: State in which the user is combining own efforts to use the innovation with related activities of colleagues to achieve a collective impact on clients within their common sphere of influence.

DECISION POINT F

LEVEL VI
RENEWAL: State in which the user re-evaluates the quality of use of the innovation, seeks major modifications of or alternatives to present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals for self and the system.

FIGURE 1 — LoU CHART

CATEGORIES

KNOWLEDGE

That which the user knows about characteristics of the innovation, how to use it, and consequences of its use. This is cognitive knowledge related to using the innovation, not feelings or attitudes.

ACQUIRING INFORMATION

Solicits information about the innovation in a variety of ways, including questioning resource persons, corresponding with resource agencies, reviewing printed materials, and making visits.

SHARING

Discusses the innovation with others. Shares plans, ideas, resources, outcomes, and problems related to use of the innovation.

Knows nothing about this or similar innovations or has only very limited general knowledge of efforts to develop innovations in the area.

Takes little or no action to solicit information beyond reviewing descriptive information about this or similar innovations when it happens to come to personal attention.

Is not communicating with others about the innovation beyond possibly acknowledging that the innovation exists.

Takes action to learn more detailed information about the innovation.

Knows general information about the innovation such as origin, characteristics, and implementation requirements.

Seeks descriptive material about the innovation. Seeks opinions and knowledge of others through discussions, visits, or workshops.

Discusses the innovation in general terms and/or exchanges descriptive information, materials, or ideas about the innovation and possible implications of its use.

Makes a decision to use the innovation by establishing a time to begin.

Knows logistical requirements, necessary resources and timing for initial use of the innovation, and details of initial experiences for clients.

Seeks information and resources specifically related to preparation for use of the innovation in own setting.

Discusses resources needed for initial use of the innovation. Joins others in pre-use training, and in planning for resources, logistics, schedules, etc., in preparation for first use.

Begins first use of the innovation.

Knows on a day-to-day basis the requirements for using the innovation. Is more knowledgeable on short-term activities and effects than long-range activities and effects of use of the innovation.

Solicits management information about such things as logistics, scheduling techniques, and ideas for reducing amount of time and work required of user.

Discusses management and logistical issues related to use of the innovation. Resources and materials are shared for purposes of reducing management, flow and logistical problems related to use of the innovation.

A routine pattern of use is established.

Knows both short- and long-term requirements for use and how to use the innovation with minimum effort or stress.

Makes no special efforts to seek information as a part of ongoing use of the innovation.

Describes current use of the innovation with little or no reference to ways of changing use.

Changes use of the innovation based on formal or informal evaluation in order to increase client outcomes.

Knows cognitive and affective effects of the innovation on clients and ways for increasing impact on clients.

Solicits information and materials that focus specifically on changing use of the innovation to affect client outcomes.

Discusses own methods of modifying use of the innovation to change client outcomes.

Initiates changes in use of innovation based on input of and in coordination with what colleagues are doing.

Knows how to coordinate own use of the innovation with colleagues to provide a collective impact on clients.

Solicits information and opinions for the purpose of collaborating with others in use of the innovation.

Discusses efforts to increase client impact through collaboration with others on personal use of the innovation.

Begins exploring alternatives to or major modifications of the innovation presently in use.

Knows of alternatives that could be used to change or replace the present innovation that would improve the quality of outcomes of its use.

Seeks information and materials about other innovations as alternative to the present innovation or for making major adaptations in the innovation.

Focuses discussions on identification of major alternatives or replacements for the current innovation.

Procedures for Adopting Educational Innovations Project, Research and Development Center for Teacher Education, University of Texas at Austin, 1975, N.I.E. Contract No. NIE-C-74-0087.

FIGURE 1—LoU CHART

CATEGORIES			
ASSESSING	PLANNING	STATUS REPORTING	PERFORMING
Examines the potential or actual use of the innovation or some aspect of it. This can be a mental assessment or can involve actual collection and analysis of data.	Designs and outlines short- and/or long-range steps to be taken during process of innovation adoption, i.e., aligns resources, schedules activities, meets with others to organize and/or coordinate use of the innovation.	Describes personal stand at the present time in relation to use of the innovation.	Carries out the actions and activities entailed in operationalizing the innovation.
Takes no action to analyze the innovation, its characteristics, possible use, or consequences of use.	Schedules no time and specifies no steps for the study or use of the innovation.	Reports little or no personal involvement with the innovation.	Takes no discernible action toward learning about or using the innovation. The innovation and/or its accoutrements are not present or in use.
Analyzes and compares materials, content, requirements for use, evaluation reports, potential outcomes, strengths and weaknesses for purpose of making a decision about use of the innovation.	Plans to gather necessary information and resources as needed to make a decision for or against use of the innovation.	Reports presently orienting self to what the innovation is and is not.	Explores the innovation and requirements for its use by talking to others about it, reviewing descriptive information and sample materials, attending orientation sessions, and observing others using it.
Analyzes detailed requirements and available resources for initial use of the innovation.	Identifies steps and procedures entailed in obtaining resources and organizing activities and events for initial use of the innovation.	Reports preparing self for initial use of the innovation.	Studies reference materials in depth, organizes resources and logistics, schedules and receives skill training in preparation for initial use.
Examines own use of the innovation with respect to problems of logistics, management, time schedules, resources, and general reactions of clients.	Plans for organizing and managing resources, activities and events related primarily to immediate ongoing use of the innovation. Planned-for changes address managerial or logistical issues with a short-term perspective.	Reports that logistics, time, management, resource organization, etc., are the focus of most personal efforts to use the innovation.	Manages innovation with varying degrees of efficiency. Often lacks anticipation of immediate consequences. The flow of actions in the user and clients is often disjointed, uneven and uncertain. When changes are made they are primarily in response to logistical and organizational problems.
Limits evaluation activities to those administratively required, with little attention paid to findings for the purpose of changing use.	Plans intermediate and long-range actions with little projected variation in how the innovation will be used. Planning focuses on routine use of resources, personnel, etc.	Reports that personal use of the innovation is going along satisfactorily with few if any problems.	Uses the innovation smoothly with minimal management problems, over time, there is little variation in pattern of use.
Assesses use of the innovation for the purpose of changing current practices to improve client outcomes.	Develops intermediate and long-range plans that anticipate possible and needed steps, resources and events designed to enhance client outcomes.	Reports varying use of the innovation in order to change client outcomes.	Explores and experiments with alternative combinations of the innovation with existing practices to maximize client involvement and to optimize client outcomes.
Appraises collaborative use of the innovation in terms of client outcomes and strengths and weaknesses of the integrated effort.	Plans specific actions to coordinate own use of the innovation with others to achieve increased impact on clients.	Reports spending time and energy collaborating with others about integrating own use of the innovation.	Collaborates with others in use of the innovation as a means for expanding the innovation's impact on clients. Changes in use are made in coordination with others.
Analyzes advantages and disadvantages of major modifications or alternatives to the present innovation.	Plans activities that involve pursuit of alternatives to enhance or replace the innovation.	Reports considering major modifications of or alternatives to present use of the innovation.	Explores other innovations that could be used in combination with or in place of the present innovation in an attempt to develop more effective means of achieving client outcomes.

E

TABLE OF CONTENTS

Whether typewritten or set in type, a Table of Contents tells the adopter where to find the various elements in any given handbook or manual. This sample is taken from Communications Disorders: An Individualized Program, produced by Project ACTIVE in Oakhurst, New Jersey. Notice the attention given to type format and layout, and the parallel arrangement of the chapter headings.

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F

FACT SHEET OUTLINE

Every diffusion project will need a simple, inexpensive handout to answer questions from various publics. This outline suggests key points that such an awareness handout should cover.

Write this type of material in a concise but "alive" style. Emphasize what's different about your program and what has particularly caught the attention of school people you've worked with.

Section I (pp. I-15-16) includes a sample of such a fact sheet.

FACT SHEET OUTLINE

Project title, agency, contact person, phone, address.

Brief abstract should include:

1. Specific objectives related to anticipated accomplishments or achievements by people who might be involved in implementing the project.
2. Curriculum area involved.
3. Target audience for these materials by grade level and/or subject-matter area.
4. Materials and/or processes developed and how they might be used by personnel in other districts.
5. List and description of major activities to be carried out by those implementing the project. (Such activities might include attendance at inservice training sessions, administration of evaluation instruments on a pre- and post-test basis, obtaining necessary project materials, and other activities unique to the project.)
6. Procedures used to develop the project materials and/or processes.
7. Previous evaluation results and the evaluation design related to the objectives presented. (Additional information about evaluation findings may be attached.)
8. Type and amount of inservice training required for school personnel to install the project properly. Specify the number of days of training required.
9. List of materials, supplies, and equipment needed to implement the project. Indicate cost for each item (it's unnecessary to itemize all normal classroom supplies) and quantity needed. Indicate the quantity by stating number needed per student, per teacher, or per building involved. More detailed cost sheets may be appended.
10. Brief history, including funding source and dates of developmental work.

G

ADOPTION FORM

Many exemplary projects have developed adoption forms (similar to the following example) as part of their overall diffusion plan. Such a form clarifies for both the developer and the adopting district their respective roles and the extent of their mutual commitment to assure successful implementation of an educational program. Other forms may be secured directly from projects listed in Educational Programs That Work or in Forms and Formalities (See recommended readings).

APPLICATION TO BECOME A HOSTS ADOPTION SITE

Please return this form to: HOSTS DISSEMINATION/PROJECT
5802 MacArthur Boulevard
Vancouver, Washington 98661

We would like to apply to become a HOSTS Adoption Site. In applying for the services offered by the HOSTS Developer/Demonstration Site, we agree to comply with the following criteria.

Please initial each statement you can agree with:

- _____ We agree to conduct a needs assessment to identify the group of students whose reading needs are not being met.
- _____ We agree that our school district has committed itself to the implementation of the HOSTS model by providing adequate human, physical and financial resources.
- _____ We agree to formulate an evaluation design utilizing both formative and normative procedures.
- _____ We agree to provide inservicing time for all participating personnel.
- _____ We agree to recruit and train volunteers.
- _____ We agree to send key personnel to D/D site for visitation of at least two days.
- _____ We agree to serve as a model for others.

Preferred date(s) for program implementation (please list more than one choice):

(Signature, Superintendent/Designee)

(School & District)

(Date)

(Telephone Number)

(Address)

CONTRACT-AGREEMENT

Relative to adoption of HOSTS Dissemination project

Parties Involved:

1. (Adopting District)
2. HOSTS Developer/Demonstration Project - Vancouver, Washington
3. (State Facilitator, if involved)

Intent of this Agreement:

To define the goals and responsibilities of each of the above, in relation to adoption of HOSTS by _____

Responsibilities:

(Adopter)

1. Provide all related personnel the opportunity to undergo prescribed five-day training sequence.
2. Provide opportunity for personnel to receive training in proper utilization of materials.
3. To recruit and train volunteers to participate in the project.
4. To evaluate the program utilizing both formative and normative tests, and collect data to determine significance. Data will be shared with D/D site.
5. To monitor project continuously to help determine areas of need or assistance.
6. Willingness to accept responsibilities to disseminate outcomes and assist others when need arises.

HOSTS D/D Project

1. Five days of training by project director and two staff members in reading management and utilization of volunteers, conducted (at site _____) or (at HOSTS in Vancouver, WA _____), starting (date) _____.
2. Provide, at cost, all materials-training manuals, reporting forms, cross referencing notebook-necessary to implementation of project.
3. Assist in organizing community resources.
4. Assisting in designing evaluation format.
5. Provide six days in addition to the five training days (See No. 1, above) for any technical assistance needed. (At mutually convenient time.)
6. Assist in the development of a model to serve others in that geographical location.

(State Facilitator) If involved.

To be specified, if involved.

(Signature, Superintendent or Designee)

(Date)

(Signature, HOSTS D/D Project Director)

(Date)

(Signature, State Facilitator) (If applicable)

(Date)

H

PROJECT MANAGEMENT DIRECTORY OUTLINE

In the recently completed Project Information Packages, particular attention was given to design and development of the Project Management Directory. Designed for use by the individual who will guide the project, it covers, in detail, aspects of management necessary to insure smooth start-up and continuation.

Other projects have developed similar manuals, calling them coordinator manuals or installation guides.

This content outline need not be followed precisely, but its comprehensiveness (based on thorough field research for USOE by RMC Research Corp.) should help to avoid inadvertent omission of vital implementation guidance that adopters will need.

USING THE PROJECT MANAGEMENT DIRECTORY

The Project Management Directory is the key manual in the PIP. It is your guide to managing Project Catch-Up* and using the PIP materials.

Organization

The Directory is organized for quick reference rather than for continuous reading from chapter to chapter. You may wish to begin by reading the Directory from cover to cover, but you will not find the answers to some of your first questions until the later chapters of the book.

Chapter summaries: Chapters 3 - 13 begin with two-page summaries:

- Page i: Chapter outline (major headings listed below)
- Page ii: Project goals, and project director tasks

Chapter 14 compiles project goals from all chapters. Chapter 15 and the Project Management Calendar compile project director tasks.

Printed pages: Some pages are printed with a shaded background to distinguish them from the main body of the text. They include memos and notices reprinted directly from existing sites, plus selected lists and charts. Items from the existing sites give some of the flavor of the original project, and may serve as examples to be adapted to your own project.

Chapter Contents

Major section headings for each chapter are listed below, grouped according to major project management categories.

Introduction

1. PROJECT OVERVIEW
 - Description of Project Catch-Up
 - History of Project Catch-Up
 - Evidence of Effectiveness
 - Organization
 - Project Director's Role
 - Summary of Project Features
2. USING THE PIP
 - PIP History
 - What the PIP Is (and Is Not)
 - Start-Up vs. Operation
 - Using the Project Management Directory
 - Contents of the other PIP Items
 - PIP Use Chart

* This particular manual covers implementation of Project Catch-Up, a laboratory program designed to provide remedial reading and math instruction for low-achieving K-6 students.

Management

3. MANAGEMENT APPROACH
The Management Side of Catch-Up
Management Features
4. COMMUNICATING WITH SCHOOL AND
COMMUNITY
The Importance of Communication
*Using the Project Orientation
Materials*
Working with the District
Decision Makers
Principals and Teachers in
Catch-Up Schools
Obtaining the Support of
Principals
Involving Classroom Teachers in
Catch-Up
Parents and the Community
5. CONTINUING BEYOND THE FIRST YEAR
Getting Started vs. Continuation
Funding
Project Changes
6. BUDGET
Fighting Delays
The Discretionary Fund
Budgeting Issues
PIP Budgeting Worksheets

Student Selection and Instruction

7. SELECTING AND SCHEDULING STUDENTS
Selecting Students
Scheduling
8. INSTRUCTION
The Catch-Up Approach
Getting Instruction Going
Summer Program

Personnel

9. SELECTING STAFF
Finding a First-Rate Staff
Staff Roles and Qualifications
10. STAFF TRAINING
The Start-Up Workshop
Training Agenda
In-Service Training
Training Goals
11. STAFF RELATIONSHIPS
Communicating Effectively
Conflicts During Student
Selection
Encouraging A Positive Approach
Cooperating in the Lab

Materials/Facilities

12. MATERIALS/EQUIPMENT/SUPPLIES/TESTS
Surveying and Ordering
Core Materials and Equipment
Stocking the Lab
Tests
13. FACILITIES
The Room You Need
Location of the Lab
Turning the Room into a Laboratory
Avoiding Clutter
Location of Your Office

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14. GOALS
Project goals from all chapters
15. TASK CHECKLISTS
Task lists from all chapters
16. INDEX

BUDGETING

Given the magnitude of school-district fiscal problems in the late 1970s, budget worksheets are an important aid to help potential adopters judge for themselves the real costs of installing and maintaining a new program. From the Project Information Package (PIP) concept comes the following example of one method of assessing the financial realities of implementation and continuation. The insert following the worksheets provides cautions about presenting per student costs.

PIP BUDGETING WORKSHEETS*

The purpose of the budgeting worksheets is to aid in estimating the resources and related budget needed to implement HIT** in a school district. The worksheets are intended to be adapted to local budgeting procedures, and the instructions assume that a district official knowledgeable in these procedures is involved in the budgeting process.

Districts differ in what they identify in their budgets as "project costs." Some include all project-teacher salaries, materials, and so on. Others include only materials, and charge salaries to a general fund. Therefore, it is important to distinguish among (a) the total project cost (all salaries, facilities, and equipment used for the project; it is very difficult to determine the total cost of a project, and few districts even attempt to do so); (b) total project budget (those items specifically identified in the district budget as project costs); and (c) the additional amount of money the district will need to install the project, over and above what is currently being spent in the district. For example, some districts may already have the required project staff on the payroll in other positions or other projects, and classroom space, materials, etc., may also be available. By reallocating these resources to the new project, it may be possible to operate with little or no increase to the total district budget. Thus, type "c" costs are often small, or even zero.

School districts also vary widely in the items which are charged directly to a project (type "b" costs). Project directors, teachers, aides, classrooms and office space, supplies, equipment, and maintenance may or may not be project budget items depending on local policies. For this reason, the budgeting worksheets include a column for amounts charged to the project budget as well as for total project requirements. Each district must then calculate project budgets and additional fund requirements according to local policy.

A detailed project description booklet from the PIP Analysis and Selection Kit should be used in conjunction with the worksheets to provide information on the resources required for the project.***

* Reproduced from the Project Orientation Materials.

** High Intensity Tutoring Program (HIT) provides an individualized reading and/or math program for students (grades 6, 7 and 8) who are performing below grade level.

*** Reference your own project descriptive materials where applicable.

The basic resource categories used in these worksheets are:

Staff: Any individual who makes a direct contribution to the attainment of the objectives of the project. Staff salaries and related costs account for about 70 to 80 percent of the first-year budgets.

Furniture and Fixtures: Furniture required in a classroom, office, auditorium, or other area for the implementation of the project curriculum.

Equipment: Any audiovisual resources or other equipment used by the project for participant instruction or project administration.

Materials: Books, instructional games, kits, programmed materials, films, tapes, records, mimeograph paper, and so on.

Transportation Cost: Any costs incurred as a result of transporting HII staff or project participants to and from instructional sessions, transporting staff for the purposes of project administration (including out-of-town travel and per diem), and all costs associated with field trips for project participants.

Technical Assistance: Any assistance or advice received in implementing the project, selecting project personnel, training staff and personnel, or evaluating the impact and effectiveness of the project.

Public Relations: Any resources used for developing understanding and goodwill between the project and the general public (usually parents of project participants).

There are two sets of cost factors to consider: (a) first-year costs and (b) subsequent annual costs. The first-year costs consist of start-up costs plus operating costs for the first year of project operations. The start-up costs include first-time expenditures to get the project under way, such as purchases of new equipment, materials, and furniture. The subsequent annual costs are the regular operating costs, that is, recurring expenditures for staff salaries, consumable materials, transportation, and equipment replacement and maintenance.

The project start-up period must begin in the spring in order to have the project operational when school starts in the fall. The major start-up costs are salaries for personnel involved in preparation and planning, teachers' salaries for a pre-project summer workshop, and preparing/equipping the project rooms. Some districts must also purchase or rent extra classroom space to implement the project.

Staff Costs (Worksheet 1)

The HIT project staff requirements are described in Chapter 1 and 9. Local salaries and benefits should be determined after studying the personnel qualifications described in Chapter 9.*

"Free" personnel. If the project director, secretary, or other personnel who contribute to the project are not to be paid out of project funds, note these "free" cases on Worksheet 1, and enter zero in Column 4.

Other possible staff charges. Local budgeting practices may require paying other out of project funds. Enter any clerks, aides, custodians, and so on, who will be charged to the project. Also enter any part-time personnel not included under "Technical Assistance" on the summary worksheet.

Cost to project. $(\text{Column 4}) = (\text{Column 1}) \times (\text{Column 2}) \times (\text{Column 3})$

Additional start-up costs. The HIT project director and certain other staff members begin planning and preparation as early as April. Any charges to the project should be entered at the bottom of Worksheet 1.

* Project Management Directory.

Worksheet 1
HIT Staff

Annual Operating Costs

Staff Category and Proportion of time required by project	(1) Number Required	(2) Proportion of time charged to project	(3) Annual Salary (Including Benefits)	(4) Cost to Project
1. Project Director (1/10 time)				
2. Teacher				
3. Aide				
4. Project Director's Secretary *				
5. Other *				
6. Total Annual Cost				
Additional Start-up Costs				
7. Project Director (1/4 time) April-August**				
8. Teacher two weeks in August**				
9. Aide two weeks in August**				
10. Project Director's Secretary *				
11. Other *				
12. Total Additional Start-up Cost				
13. Total Start-up/First-year Cost (line 6 + line 12)				

* Depends on local needs or requirements.

** Assumes school starts about September 1. Adjust to suit local start date.

Facilities (Worksheet 2)

Requirements for facilities are described in the project description booklet. Facilities include instructional space, office space, and the associated furniture and fixtures.

In many districts, office and classroom space is not charged directly to the project. Exceptions may occur where classroom space must be purchased or constructed, or where vacated buildings are reactivated specifically for project use. Operating expenses (utilities, custodial service) may or may not be charged. Space requirements must be determined and budgeted according to local needs and availability. Furniture is also available from district supplies in many cases at no direct cost to the project. Major cost items (buildings) are usually amortized over many years. Furniture is figured as a one-time start-up cost in some districts and amortized in others.

Column 1: Recommended number of units per center (except project director's office, one of which is required for the entire project).

Column 2: Enter the number of centers times the actual number of units per center. (Local considerations may make the actual number different from the recommended number per center.)

Column 3: Standard items are frequently available from district supplies at no cost to the project. Enter the number of "free" units here.

Column 4: (Column 2) - (Column 3).

Columns 5 and 6: Depending on district policy, items may either be purchased outright from first-year funds, amortized over the life of the item, or rented. Enter in column 5 the full price of items to be purchased outright. Enter in column 6 the annual cost for items which are amortized, rented, leased, and so on. For all items, enter zero in the column which does not apply.

Column 7: Enter annual operating costs including replacement/repair according to district policy. Operating costs for rented items may be included in the rent. If so, enter zero.

Column 8: Add columns 5 and 7 for items to be purchased out of first-year funds. Add columns 6 and 7 for amortized or rented items.

Column 9: Add columns 6 and 7.

Worksheet 2
HIT Facilities

Start-up and Operating Costs

	(1) Minimum Recommended Number Per Center	(2) Total Number for Project	(3) Number Avail- able At No Cost	(4) Number to be Purchased/ Rented	(5) Outright Purchase Price Per Unit	(6) Amortized Cost/Annual Rent Per Unit	(7) Annual Operating Cost per Unit	(8) Total Start-up/ First-year Cost	(9) Subse- quent Annual Cost
Space									
Classrooms	1								
Office (project director)			1						
Classroom Furniture/Fixtures (including replacement/repair)									
Student Desks*	24								
Teacher's desk/chair	1								
Tables	3								
Shelves	1 set								
Cabinet lockable	1								
File drawers	4								
Other (blackboards, partitions, drapes, air conditioning, etc.)									
Office Furniture/Fixtures (including replacement/repair)									
Desks									
Chairs									
Shelves									
Other									

TOTALS _____

* May substitute 12 tutoring tables with 24 chairs.

Total Costs (Worksheet 3)

Lines 1 and 2 are taken from the appropriate totals on Worksheets 1 and 2.

Materials (Line 3): HIT centers utilize a minimum of materials and require no special equipment (see the HIT project description booklet, attached). Adequate funds for tutee rewards must be provided. The following minimum amounts are recommended for each reading or math center:

	<u>First year</u>	<u>Subsequent years</u>
Programmed and drill materials, books, games, supplies	500	125
Tutee rewards	300	300
Total	800	425

Transportation (Line 4): HIT includes a field trip for tutors as a regular part of the project. About \$300 per center should be budgeted. In addition, district policy should be followed in budgeting for project director travel, teacher travel to in-service training, or other standard items.

Technical Assistance (Line 5): There are no specific HIT requirements for outside assistance in planning the project or training the staff. Assistance in project evaluation is suggested in the Evaluation Manual. Assistance in any of these areas should be budgeted according to district policy.

Public Relations (Line 6): Project publicity, including education fairs, may require special budgets in some districts.

Total (Line 7): Add lines one through six.

Worksheet 3

HIT Total Costs

	A First-Year Cost	B Subsequent Annual Cost
1. Personnel	_____	_____
2. Facilities	_____	_____
3. Materials	_____	_____
4. Transportation	_____	_____
5. Technical Assistance	_____	_____
6. Public Relations	_____	_____
7. Total	_____	_____

Cost Per Student

Even after you've read the budgeting worksheets (see previous pages), there remains a further need for caution about presenting costs to potential adopters. Some of these points will seem obvious to experienced educators and experienced linking agents, but they are worth repeating here as guidelines for packagers.

"Cost per student" figures should not be printed in any diffusion information unless they cover fixed-cost items like materials. Any fixed figure is likely to mislead administrators and board members as to the cost in their own districts. It will also confuse the issue when comparing one project with another.

Costs for a given project vary tremendously from one district to another. The relative costs of two projects also differ greatly. The most expensive project in one district may be the cheapest in the next district. There are three main reasons:

- Local costs differ. This factor obviously affects costs, but less obvious is the effect on relative costs of projects. Costs for materials remain relatively constant, but salaries vary widely. Therefore, project costs are affected by the mix of teachers and materials.
- Items charged to the project differ. One district may charge teacher (or project director) salaries to the project. The next may not. One district may need to hire special personnel for a project. Another district may already have the personnel for that project but may need to hire personnel for a different project.
- Cost-per-student depends on project size. Some projects become less costly as size increases. Others don't. Thus, a project might seem inexpensive in a large district, but expensive in a small one.

J

MATERIALS PRESENTATION

Note this format for presenting levels of available materials in a K-8 reading program. Since commercial publishers often provide this kind of information to potential adopters, a nonprofit developer may wish to use this technique if it seems applicable to the project's materials. (Reproduced, courtesy of Harper & Row Publishers, Inc.)

LEVEL	READINESS	SEQUENTIAL SKILLS PROGRAM			APPLYING READING SKILLS IN CONTENT AREAS	APPLYING READING SKILLS FOR ENJOYMENT	GUIDING PERSONAL READING	EXTENDING CREATIVELY IN READING
		Pupil Texts	Basic Materials for Teaching & Reinforcement	Additional Accessories				
	GET READY		Teacher Edition					
	GET SET		Teacher Edition	Animal Alphabet (27) Letters & Numerals (63)	Pre-Test & Post-Test			Creative Reading I 6 titles (8 books each + 48) + Records & Filmstrips & Audio Interview Record & T. Ed.
	GO READ!		Teacher Edition	Words & Sounds (28 Cards) People Cards (11)				
Aa Ab Ac		PLACES AND PUZZLES FISH AND FABLES FAIRY AND RIDDLES	Teacher Edition Workbook & T. Ed. + "Sounds and Signals A" **Duplicating Masters	Pre-Test Post-Test Management & Tutorial 1 Word Cards (Aabc)				Creative Reading II (For Levels Aa - Ae) Materials same as for C. R. I
		VEGETABLES AND WHEELS	Teacher Edition Workbook & T. Ed. + "Sounds and Signals B" **Duplicating Masters	Pre-Test Post-Test Management Charts & Tutorial 1		ONCE UPON A TIME		Continue (Creative Reading II)
1st Reader Ad		SOCKS AND SECRETS	Teacher Edition Workbook & T. Ed. + "Sounds and Signals C" **Duplicating Masters	Pre-Test Post-Test Management Charts & Tutorial 1	FROM DOLPHINS TO DUNES & T. Ed. Workbook & T. Ed.	I KNOW A STORY		Continue (Creative Reading III)
2nd Reader B	Transitional Paperbacks (15)	Next Best, Green Lady, etc.	Teacher Edition & Workbook & T. Ed.					Creative Reading III Materials like those for C. R. I & II
		PETS AND PROMISES	Teacher Edition Workbook & T. Ed. + "Sounds and Signals D" **Duplicating Masters	Pre-Test Post-Test Management	FROM SKYSCRAPERS TO SQUIRRELS & T. Ed. Workbook & T. Ed.	IT HAPPENED ONE DAY	STEPPING STONES Teacher Edition Workbook & T. Ed.	
3rd Reader C	Transitional Paperbacks (15)	The Right Thing to Do, etc.	Teacher Edition Workbook & T. Ed.					Creative Reading IV Materials like those for C. R. I, II, & III
		TROUBLE AND TURNIPS	Teacher Edition Workbook & T. Ed. + "Sounds and Signals E" **Duplicating Masters	Pre-Test Post-Test Management	FROM MYSTERIES TO MICROBES & T. Ed. Workbook & T. Ed.	AFTER THE SUN SETS	SPRINGBOARDS Teacher Edition Workbook & T. Ed.	
4th Reader D	Transitional Paperbacks (15)	The Phantom Hunter, etc.	Teacher Edition Workbook & T. Ed.					
		DREAMS AND DRAGONS	Teacher Edition Workbook & T. Ed. **Duplicating Masters	Pre-Test Post-Test Management	FROM PYRAMIDS TO PRINCES & T. Ed. Workbook & T. Ed.	IT MUST BE MAGIC	"Opening Doors" Worktext & T. Ed.	
5th Reader E		MOCCASINS AND MARVELS	Teacher Edition Workbook & T. Ed. **Duplicating Masters	Pre-Test Post-Test Management	FROM FALCONS TO FORESTS & T. Ed. Workbook & T. Ed.	BRAVE AND BOLD	"Departures" Worktext & T. Ed.	
6th Reader		TIME AND TIGERS	Teacher Edition Workbook & T. Ed. **Duplicating Masters	Pre-Test Post-Test Management	FROM LIONS TO LEGENDS & T. Ed. Workbook & T. Ed.	TALES THEY TELL	"Shifting Scenes" Worktext & T. Ed.	

* Teacher Guidebook Available ** Answer Key Available

K

EVALUATION

This brief discussion highlights several important aspects of program/project assessment. A resource volume is recommended and several formats and forms are reproduced as possible guides.

EVALUATION

Your own project evaluator (or evaluation consultant) can help set up procedures that will enable adopters (or adaptors) determine if they're succeeding with your program at the various implementation sites. An excellent general resource is A Practical Guide to Measuring Project Impact on Student Achievement (stock number 017-080-01460-2) which is available at \$1.90 postpaid from: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. This 120-page handbook covers common hazards in evaluation, evaluation models, collecting data (testing and recording), analyzing and reporting data, and much more.

Your evaluator or consultant can adapt your original project evaluation design to fit conditions of use elsewhere. Normally that will involve pre and post testing by the adopting district of a random sample of learners and of a control group, perhaps with technical assistance from your project.

The district may also want to use other measures (including unobtrusive ones), such as change in rates of absenteeism, disciplinary referrals, vandalism, or creativity. However, the critical measurement is likely to be behavioral changes in learners "enrolled" in your program compared to those observed in a control group.

Assessment Forms

An important aspect of the field testing of a promising practice is to acquire (early in the developmental process) user feedback on variables that will affect how well the materials will ultimately meet user needs (readability, organization, etc.).

Two examples of ways to collect such information are shown--one that assessed the quality of the first draft of a coordinator manual and the other to gauge the quality of the preliminary version of an adult learner manual. (PFT = preliminary field test.)

ASSESSMENT FORMS

FEEDBACK ON COORDINATOR MANUAL -- "Teaching Language Skills in an Integrated Way" -- Margot Biestmar

General Questions

1. Is the manual adequate to help you to train teachers and teaching assistants?

The manual has made it very easy.

2. What parts would you leave the same in the coordinator manual?

Leave the manual as is -- The Trainer will change to suit her needs, or create as needs or levels arise.

3. What changes would you make in the manual if you were the trainer?

Include suggestions for other experiences that will give other choices. I did suggestion or say to teachers that the process can be use in any situation. I used telephone wires for scribbles and bubbles to see if teachers were getting the idea.

4. The next revision of this manual will contain lesson plans for the trainer for a course, given 1-1/2 hours each week for 12 weeks, as if it were a college course. Would this be useful for you or would you rather plan how you will teach the material yourself, using the three workshops as outlined?

Lesson plans will save lots of time. I found the 2 plans very helpful. Because of time/other activities I eliminated or added my experience. But found it all useable.

9. Were the directions adequate for you to assess teacher's plans and children's work according to criteria? Yes ☒ No ☐

If directions were inadequate, what would you suggest?

Directions were very good.

10. Were the directions adequate for you to assess teacher's performance in the classroom, using observation form? Yes ☒ No ☐

If directions were inadequate, what would you suggest?

I found the units and activities very long.
{ I think it was poor timing.. This time of year ^{is} was very bad. I can see this very useful in September with experienced teachers, yet. (Even!)

From the middle of March to the closing of school is a poor time for such involvement. I felt my self rushing to get through.

{ I would really have liked to do these units in September where I could have worked more closely with Teachers and with small groups myself.

I will do this again when every body has more time. 161

Specific Questions - Answer only those which you have read or tried out.

5. Would the listening walk workshop help you to get across the criteria for listening integrated with other language arts? Yes X No

What would you leave the same?

Leave the same - allow participants to discriminate. I got good results here in lesson plans -

What changes would you make?

Working with experienced teachers - I did an orientation by taking classroom situations and excerpts from basal readers to get across the idea of integration. Cite examples let learner adapt to criteria

6. Would the Balloon Fantasy workshop help you to get across the criteria for teaching language skills in an integrated way? Yes X No

What would you leave the same?

Leave as is

What changes would you make?

include another common experience. I used the bubble solution. The children ^{teachers} drew what they saw and did similar activities. Some did not want to fantasize. This made it easier.

7. Would the workshop on "Book of Children and Their Families" help you to get across the criteria for teaching language skills in an integrated way? Yes X No

What would you leave the same?

What would you change?

This unit did not go over too well. Time perhaps. They could see adult usage but not for children.

8. Were the activities in the guide meaningful to you? Yes X No

Which activities were meaningful? ~~was~~ The

Which activities were not meaningful? How would you change them so they would be?

The activities were good. I found the Teachers and children responded to bubbles - instead of balloons

PFT Learner Questionnaire
3/74

Check appropriate box for items 1-14

1. Are unit objectives important?

☐	☒	☐	☐	☐	☐
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

most important (Comment:) most unimportant

2. Are objectives of the unit relevant to your needs?

☒	☐	☐	☐	☐	☐
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

relevant (Comment:) irrelevant

3. Is it possible to accomplish these objectives?

☒	☐	☐	☐	☐	☐
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

possible (Comment:) impossible

4. Are the activities and lessons in the unit likely to result in achieving unit objectives?

☐	☒	☐	☐	☐	☐
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

very likely (Comments:) very unlikely

5. Rate activities and lessons of the unit on the following scales.

Activities and lessons are :

☒	☐	☐	☐	☐	☐
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

interesting (Comments:) dull

Activities and lessons are :

☐	☒	☐	☐	☐	☐
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

well-organized (Comments:) poorly-organized

Instructions are :

☒	☐	☐	☐	☐	☐
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

clear (Comments:) unclear

Activities and lessons are :

☐	☒	☐	☐	☐	☐
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

worth the effort (Comments:) not worth the effort

Language used is :

☒	☐	☐	☐	☐	☐
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

understandable (Comments:) not understandable

6. Will you take other units when they are available?

☒	☐	☐	☐	☐
definitely yes				definitely no

(Comments:)

7. Will you recommend this unit to someone else?

☒	☐	☐	☐	☐
definitely yes				definitely no

(Comments:)

8. How would you compare this training unit with other forms of training?

☐	☒	☐	☐	☐
definitely superior				definitely inferior

(Comments:)

9. What would you pay for this training unit when it has been fully developed?

☐	☐	☐	☐	☒
over \$100	\$75- \$100	\$50- \$74	\$25 \$49	\$10- \$24

(Comments:)

10. Would you recommend it for purchase at that price?

☒	☐	☐	☐	☐
definitely yes				definitely no

(Comments:)

11. How would you rate the overall quality of the unit?

☐	☒	☐	☐	☐
excellent				poor

(Comment:)

12. Would you take this unit if college credits were given?

☒ Yes ☐ No

13. Would you take this unit if no college credits were given?

☒ Yes ☐ No

14. How would you prefer to take this training unit?

☐ as a self-instructional unit (without a trainer)
☒ as part of a group training program (with trainer)
☐ other: _____

15. What activities/lessons did you like and would leave the same?

16. What activities/lessons would you change? (give page number reference)

17. How would you change these activities/lessons?

Presenting Your Project's Evaluation Data

Most people interested in your project will have little or no need for your full summative evaluation data; a few carefully selected examples will tell a curriculum specialist or school administrator all he/she needs to decide whether to seek further information on your program. Reference any available evaluation documents for those who want more complete data. Two examples of concise reports (as included in project brochures) and a well-planned evaluation information sheet follow.

PROJECT ADVENTURE, HAMILTON, MASSACHUSETTS

EVALUATION

Formal evaluation of the Project has shown statistically significant results (at the .05 level) in scores on affective and psychomotor tests administered on a pre-post basis for three consecutive years. Positive gains for students have resulted from involvement with the Project in the areas of self-concept, decreases in passivity, improved physical functioning and openness to change.

A major part of the evaluation consisted of a battery of six tests given to the three target classes of two hundred Sophomores before and after they participated in the year long physical education program and a varied course of study which contained further elements of "adventure curriculum." The tools used in evaluation included the Tennessee Self-Concept Scale, The Rotter Test of Internal vs External Control of Reinforcement, David McClelland's Classroom Climate Survey, a Student Questionnaire, a Self-Rating Scale, and a modified version of the AAHPER Test of Physical Fitness.

The findings indicate that while the class as a whole showed definite improvement, girls showed greater gains in self-concept and

activity levels as a result of participation in the Project Adventure program.

A questionnaire mailed to the parents of two of these classes indicated that parents noted a "refreshing enthusiasm," "growing confidence" and "a more positive attitude" among their children which they attributed to the Project's activity. Anecdotal materials, journal entries and audio-taped group evaluations generally support these statistical findings.

INSTITUTE FOR POLITICAL AND LEGAL EDUCATION (IPLE), PITMAN, NEW JERSEY

GOALS, EVALUATION DESIGN AND RESULTS

Goal No. 1.

After the course of study, participating students will score significantly higher on the staff-developed Test of Political Knowledge than before.

The Test of Political Knowledge was administered on a pre and post basis to a representative sample of students participating in the program and control group students following a traditional social studies program. Test scores were analyzed by a two-tailed T test which showed that the students in the experimental group scored significantly higher on the post test than did those in the control group. Thus Goal No. 1 was achieved.

Goal No. 2.

After the course of study, participating students will demonstrate a significant positive change in attitude toward active involvement in the political and governmental process as measured by the staff developed Inclination to Participate Test.

The test was administered on a pre and post test basis to a representative sample of students participating in the program and to control group students in a traditional social studies program. The test data were analyzed by the Wilcoxon T-test which showed that the experimental group scored significantly better on the post test than did those in the control group. Thus Goal No. 2 was achieved.

Testing Program

Tests:

Murphy-Durrell Reading Readiness Analysis
Metropolitan Achievement Tests—Battery and Reading

Schedule:

Grade	Test	Time
K	Murphy-Durrell	Spring
1	Met.—Primer, Primary	Fall/Spring
2	Met.—Battery, Primary I	Fall/Spring
3	Met.—Reading, Primary II	Fall/Spring
4	Met.—Reading, Elementary	Fall/Spring
5	Met.—Reading, Intermediate	Fall/Spring
6	Met.—Reading, Intermediate	Fall/Spring
6+	Met.—Reading, Advanced	Fall/Spring

Letter Names

56% (223/400) scored at the 90 percentile or above.
23% (92/400) scored at the 80-89 percentile.
8% (32/400) scored at the 70-79 percentile.
4% (17/400) scored at the 60-69 percentile.
9% (36/400) scored below the 59 percentile.

Letter Sounds

49% (196/400) scored at the 90 percentile or above.
20% (80/400) scored at the 80-89 percentile.
6% (23/400) scored at the 70-79 percentile.
4% (17/400) scored at the 60-69 percentile.
21% (84/400) scored below the 59 percentile.

To measure sight word mastery of 50 words a criterion reference test was developed and administered in the latter part of May. 60 words consisting of: 1) Books 1 and 2 of the Sullivan Reading Series, 2) Houghton-Mifflin, 3) Scott Foresman, were used as the basis of the words tested.

Results

73% (310/425) were able to identify 50 words or more as measured by the criterion reference test.

Table I-A Grade 1 — Standard Scores

Variable	N	Pre	Post	Mean Gain	t	Sig.
Word Knowledge	342	32	52	20	40.99	p<.01
Word Reading	342	29	48	19	44.79	p<.01

Table I-B Post Metropolitan Achievement Test Analysis
Grades 2-6 (Total Reading—G.E.U. Scores)

Grade	N	Pre	Post	Mean Gain	t	Sig.
2	340	2.37	3.54	1.17	25.14	p<.01
3	349	3.31	5.25	1.94	5.375	p<.01
4	402	4.23	5.23	1.00	22.81	p<.01
5	416	5.15	6.28	1.13	6.257	p<.01
6	452	6.24	7.03	.79	8.213	p<.01



reading
improvement
project

212 East Avenue Napoleon, Michigan 49261 Phone (517) 536-8639
Georgia Van Adestine, Project Director

Monitoring

Monitoring may be viewed as your determination of the extent of program use in various adopter districts.

Obviously, the key program staff of any adopter district must be informed about the essential elements of your project and they must know precisely how to tell if all these elements are actually being used properly. A frequently used instrument for verification is a comprehensive, clearly written checklist (see Dale Avenue sample on next page), itemizing exactly what should be happening in the learning situation over a given time period. Teachers use checklists of this type for their record-keeping, but they can be used effectively also to judge the degree of implementation across a number of learning situations (e.g., classrooms). Your project staff can also use them to ascertain what (if any) additional training may be needed at adopting sites. Without the collection of this type of information and without testing of learners at new sites, you'll lack any real data on student performance in your program as it moves into further stages of national diffusion.

DALE AVENUE MONITORING SHEET

TEACHER'S NAME _____ GRADE LEVEL _____
MONITORING DATE _____ TIME _____
CONFERENCE DATE _____ TIME _____

Use of Performance Objectives

1. Is there a definite relationship between information in record book and grouping of children? (Yes means there is grouping in most areas with most of the children.)
2. Are there centers or stations set up at which specific objectives are taught or reinforced?
3. Are students functioning independently in appropriate centers with appropriate materials?
4. Are more than one half the materials in the room keyed into specific performance objectives? (labeled with performance objective numbers.)

Mechanics of Grouping

1. Is the furniture arranged so that grouping is convenient?
2. Do groups frequently change in composition and skill level? (Ex. Mary is in one group for Math and another for listening.)
3. Is the number of groups always the same?
4. Are students free to move to another group or activity when they have completed assigned tasks?

Variety of Materials

1. Is there a classroom library?
2. Are there teacher made materials?
3. Are there newspapers, pamphlets, magazines available?
4. Are there materials on different levels of difficulty?
5. Are phonographs, filmstrips, tapes, being utilized by the students to teach/reinforce specific objectives?

6. Are worksheets, charts, commercial games and language development kits utilized to teach and/or reinforce specific objectives?

7. Are some or all of the following manipulatives in use:

- | | |
|---|--|
| ☐ Puzzles | ☐ Water Play |
| ☐ Parquetry Blocks | ☐ Housekeeping Play |
| ☐ Blocks | ☐ Feeling Boxes |
| ☐ Beads | ☐ Ball |
| ☐ Pegboards | ☐ Crayons |
| ☐ Seriation Boards | ☐ Finger Paints |
| ☐ Sorting Trays | ☐ Cut out Books |
| ☐ Clay | ☐ Board Games |
| ☐ Paste | ☐ Scissors |
| ☐ Sand Play | ☐ Other _____ |

8. (To be filled in by teacher prior to monitoring)

The following performance objectives will be taught/reinforced during the monitoring session.

Listening	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Naming	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Speaking	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Observing	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
WMS	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
PMS	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Math	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Dec/Enc	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Seriation	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Classification	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Pupil Autonomy

1. Are pupils using self-direction in carrying out assignments?
2. Do pupils lead activities and/or teach other students?

3. Are problem solving activities (where method of attack is decided by the student or where there are many acceptable responses) part of the daily activities?
4. Is there evidence of exchange of ideas between children (spontaneous language?)
(Note to teachers in classes where there are many non-English speaking children:
the spontaneous language referred to is standard English.)

Classroom Monitoring

1. Are parents in the classroom as volunteer aides?
2. Are parents assigned to:
 Make materials ()
 Do clerical work ()
 Work with a child according to teacher's
 prescription? ()

Diffusion Activity Assessment

Your diffusion project may also decide to make informal measurements of its own training program, using questionnaires or observations with the adult trainees. (See sample from ECOS Training Institute.) Use of this type of evaluation will enable you to change and improve your training techniques, based on constructive comments received from trainees.

ECOS TRAINING INSTITUTE

S A M P L E

Participant Reaction Form

The ECOS staff need your candid opinions on this training session in order to improve the training program with other school districts. All responses will be held in strictest confidence. Please supply the following information for comparison purposes:

School District

Principal Educational Role
(e.g., Teacher, Supervisor,
Principal, Community, other)

Check one:

No. of years of teaching/adminis-
trative experience:

Grade level:

____ less than five years
____ between five and ten years
____ more than ten years

____ elementary (K-6)
____ secondary (7-12)

1. PLEASE CHECK ONLY THOSE STATEMENTS BELOW THAT T ACCURATELY
HOW YOU FELT ABOUT THIS TRAINING EXPERIENCE. READ ALL STATEMENTS
BEFORE YOU BEGIN. CHECK AS MANY AS YOU THINK ACCURATELY DESCRIBE
YOUR REACTIONS.

- ____ A. It was one of the most rewarding experiences I ever had
- ____ B. Exactly what I wanted
- ____ C. I hope we can have another one in the near future
- ____ D. It provided the kind of experience that I can apply to my
own situation
- ____ E. It helped me personally
- ____ F. It solved some problems for me
- ____ G. I think it served its purpose
- ____ H. It had some merits
- ____ I. It was fair
- ____ J. It was neither very good nor very poor
- ____ K. I was mildly disappointed
- ____ L. It was not exactly what I needed
- ____ M. It was too general
- ____ N. I am not taking any new ideas away
- ____ O. It didn't hold my interest
- ____ P. It was much too superficial
- ____ Q. I leave dissatisfied
- ____ R. It was very poorly planned
- ____ S. I didn't learn a thing
- ____ T. It was a complete waste of time

11. PLEASE RATE THIS TRAINING INSTITUTE BY CIRCLING ONE NUMBER FROM 1 to 5 FOR EACH OF THE FOLLOWING CATEGORIES:

5 4 3 2 1
very clear unclear

5 4 3 2 1
appropriate inappropriate

comprehensive 5 4 3 2 1 superficial

5 4 3 2 1
easily understood ambiguous

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E. ORGANIZATION: How well was the workshop organized?

5 4 3 2 1
very not
well well at
all

COMMENT:

F. ACCOMPLISHMENTS: Do you feel that the workshop accomplished what it set out to do?

5	4	3	2	1
met its objectives				did not meet objectives

COMMENT:

G. PRACTICALITY: Were the practical applications of the process evident?

5 4 3 2 1
quite not
evident evident

COMMENT:

H. HAND-OUTS: Were the hand-outs sufficiently helpful?

5 4 3 2 1
quite not at all
helpful helpful

COMMENT:

IV. PLEASE RATE THIS TRAINING INSTITUTE BY CIRCLING ONE NUMBER FROM 1 TO 5 FOR EACH OF THE FOLLOWING CATEGORIES:

A. PACE: How was the pace at which the material was presented?

5	4	3	2	1
very		just		too
slow		right		fast.

COMMENT:

B. LEVEL OF DIFFICULTY: How would you rate the workshop?

5 4 3 2 1
too just right too
elementary difficult

COMMENT:

C. SIZE: Was the number of trainees participating in the workshop satisfactory for conducting workshops?

5 4 3 2 1
too just right too
small large

COMMENT:

D. ACTIVITIES: Were there enough hands-on activities?

5 4 3 2 1
not just too
enough right much

COMMENT:

E. INTERACTION: Was there adequate time for sharing of ideas or group interaction?

5 4 3 2 1
not enough just right too much
interaction interaction

V. PLEASE RATE THE FOLLOWING CONCEPTS ON THE BASIS OF HOW WELL THEY WERE EXPLAINED. CIRCLE ONE NUMBER FROM 1 TO 5 FOR EACH OF THE FOLLOWING:

Concepts	Excellent	Poor
1. Adoption Level I - - - - -	5	4
2. Adoption Level II - - - - -	5	4
3. Community-School Interaction - - - - -	5	4
4. Environmental Stewardship - - - - -	5	4
5. Infusion - - - - -	5	4

OVERALL REACTION TO WORKSHOP:

7 6 5 4 3 2 1
Good Poor

THINGS LIKED BEST:

THINGS THAT COULD BE IMPROVED:

GENERAL COMMENTS:

First Adoption Workshop
URBAN ARTS PROGRAM
Dissemination Workshop Evaluation

Your Code _____

Please rate the following workshop procedures as to their value to you as a potential adopter of any or all of the Urban Arts Program.

	High		Low		
A. DAY I					
1. Assessment of the needs of students, artists, school and community in making a better arts program.	1	2	3	4	5
2. Anticipated value of assessment model.	1	2	3	4	5
3. Assessment of available resources within the school and community.	1	2	3	4	5
4. Simulation/planning session involving teachers, administrators, and artists in planning an arts project.	1	2	3	4	5
DAY II					
5. Visitation of potential sites for urban arts activity.	1	2	3	4	5
6. Discussion of potential site attributes.	1	2	3	4	5
7. Simulation/planning session on program development and implementation costs.	1	2	3	4	5
B. Now please rate the following general aspects of the workshop as to their contributions to you.					
	High			Low	
1. Extent to which workshop met your needs for information.	1	2	3	4	5
2. Effect of the workshop on your interest to adopt the U.A.P.	1	2	3	4	5
3. Effectiveness of the workshop leadership in conveying information:					
a. director.	1	2	3	4	5
b. artist.					
4. Effectiveness of workshop leadership in relating to participants:					
a. director.	1	2	3	4	5
b. artist.					
5. The value of the "Adopting Urban Arts" Handbook.	1	2	3	4	5

L

CONTACTING SCHOOL DISTRICTS

One critical aspect of field testing is the initial contact with a participating school district. The pages that follow are condensed from an R&D agency's early "Field Work Guide." These how-to suggestions must obviously be adapted for use elsewhere; they are included here in the event that a developer is planning for a first effort in external field testing of a promising practice.

CONTACTING SCHOOL DISTRICTS FOR TEST SITES

Field Test Timeline

This timeline can be used as a checklist. It allows 8 weeks between the initial contact with the district Superintendent and the beginning of the Minicourse.

Nine Weeks Before Field Test

- Determine your requirements: (VTR equipment, number of course dubs, number of teachers, number of school districts, number of schools, grade levels and subject areas).
- Establish chart or diary for recording contacts and schedules.
- File tentative equipment request with Production Department.
- Make arrangements for course credit.

Eight Weeks Before Field Test

- Make initial contacts with school Superintendents.

Seven Weeks Before Field Test

- Meet with principals in interested districts.

Six Weeks Before Field Test

- Meet with interested teachers.

Five Weeks Before Field Test

- Get commitment from teacher volunteers.
- If a control group is to be used, identify control teachers and get commitment.
- Visit schools and look at available microteaching rooms.

Four Weeks Before Field Test

- Send letter of agreement to the district Superintendent.
- File final equipment requests with Production Department. Furnish maps and room locations for equipment delivery.

Three Weeks Before Field Test

- Begin planning pre-taping and microteaching schedules with the teachers and principals.
- Plan substitute requirements with the principals.

Two Weeks Before Field Test

- Meet at each school with participating teachers to answer questions concerning pre-taping and microteaching procedures and schedules.
- Equipment training for Laboratory personnel, if needed.
- Deliver pre-taping instructions.
- Inform schools of day and approximate hour of equipment delivery.
- Prepare pre-taping labels for video reels.

One Week Before Field Test

- Pre-taping.
- Train teachers to use the VTR.

The Initial Contact

The following guidelines are recommended:

- When possible, initial contact should be made in person. Phone calls or personal visits are the best contact procedures; however, it is sometimes necessary to make the initial contact by letter. The content of the letter is critical. For this reason the contact letter from Minicourse 1 is included here as a model. If you use the letter, adapt it to the product you are field testing.
- One person should make all initial contacts. There is often a breakdown in communication when several individuals are involved in this phase.
- The first contact in any school district is to the district office--either the Superintendent of Schools or an Assistant Superintendent. In general, contact the Superintendent first because you will eventually need his/her support. In some instances, the Assistant Superintendent handles the district's inservice training, and in these cases (often cited in our department files) you will initially contact him/her. Keep in mind, however, that the Superintendent must give approval before a field test can take place in his/her district.
- Since a main field test requires from 30 to 60 teachers, contact a sufficient number of school superintendents. Consider the need for including schools which represent a range of socioeconomic groups and living environments

(urban, rural, suburban). A minimum of 4 teachers at each elementary school and 5 at each secondary school makes for efficient use of coordinator time and videotaping equipment. In the recommended 3-day-per-week pattern, it is economical to try for 8 elementary or 10-12 secondary teachers per school. During a preliminary field test a school district should normally be willing to commit 6 to 10 teachers; during a main field test, the district should provide 15 to 20 participants.

- School sites initially considered for a preliminary or main field test should be located no further than one hour's driving time from the Laboratory. The closer the school sites are to the Laboratory, the easier it is to conduct the field test. The rationale for this recommendation is as follows:

The course schedule breaks down if equipment repair and replacement involves too long a delay.

The wear and tear on personnel traveling to and from the school is a problem when distances are great. A coordinator can cover 3 or 4 schools if the schools are within a few miles of each other.

It is sometimes necessary to get extra or overlooked materials into the field quickly; here again, the distance factor becomes a problem.

Per diem cost to the Laboratory is high when travel distances are great.

MODEL CONTACT LETTER
(Remember, phone or personal contact is better.)

(Date)

Mr. John Smith, Superintendent
County Unified School District
California

Dear Mr. Smith:

The Far West Laboratory is preparing to conduct a main field test for Minicourse 1 some time around _____. The course is designed to help improve the questioning techniques of teachers at the elementary school level.

The Minicourse is a new and exciting inservice educational product developed by the Far West Laboratory for Educational Research and Development, based around the video-tape recorder and microteaching. The Minicourse has attracted nationwide attention as a significant innovation in the field of teacher training.

Briefly, the course is a complete self-contained inservice package for teachers. Specific teaching skills are demonstrated and explained through instructional tapes and written materials. The teacher then practices these skills in a short lesson using a small group of pupils. This lesson is videotaped by the teacher, and viewed immediately after the lesson. This viewing is guided by objective evaluation forms which permit the teacher to analyze her performance and reteach the lesson with an improved performance.

The Far West Laboratory supplies all the VTR equipment as well as instructional tapes and written materials. In addition, the Laboratory provides trained personnel to supervise the field test.

Results with Minicourse 1 indicate that the course is highly effective in helping teachers improve their questioning techniques. I would like to meet with you and/or one of your representatives, as well as principals, to explore the possibilities of conducting the main field testing in your district.

Please contact me at the Laboratory: (415) 565-3000, ext. _____ if you are interested.

Sincerely,

(Your Name)
Far West Laboratory Representative

Follow-Up

After the initial contact is made, whether by letter, by phone, or in person, a letter outlining the basic requirements of the field test is necessary. Superintendents prefer commitments in writing. The follow-up letter from the main field test of Minicourse 5 is included as a model. You may adapt this letter to the product you are testing.

MODEL FOLLOW-UP LETTER

(Date)

Mr. John Smith, Superintendent
County Unified School District
California

Dear Mr. Smith:

After speaking with you today, I thought it might be helpful to recapitulate some of the Laboratory's concerns vis-a-vis the main field test of Minicourse Five: Effective Tutoring in Elementary School Mathematics.

1. The Laboratory needs at least sixteen teacher volunteers per district, four volunteers per school.
2. The teachers must be furnished with fifty to sixty minutes released time, two or three days a week.
3. The teachers must be willing to answer a questionnaire regarding their educational background, and they must agree to allow us to videotape thirteen-minute segments of their teaching before and after the Minicourse. This videotape is made for evaluation purposes.
4. Participating schools must furnish secure rooms for microteaching.
5. The Laboratory will furnish videotaping and play-back equipment, four instructional and model lessons, videotape for microteaching, handbooks, and supervisory personnel.
6. Minicourse Five will run four weeks: April 14-May 5.

I look forward to meeting with you and your principals on March 6. Please contact me before then if I can be of help. Thank you for your interest.

Sincerely,

(Your Name)

Far West Laboratory Representative

M

INDEX

An index may be unnecessary in a compact manual, but if one is to be included it should be both clear and comprehensive. A sample index page from a Project Information Package is shown here to suggest one way of indexing a multi-section package.

Note that page numbers throughout this sample index page are consecutive within each section rather than consecutive across sections. (E.g., Section 4 is paginated 4-1, 4-2, etc.; Section 2 is paginated 2-1, 2-2, etc.) Note, too, that this packaging manual is also paginated the same way.

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N

AVOIDING BIAS

Many groups now evaluate instructional materials. From a 1974 Guide to Textbook Evaluation come the following suggestions on ways to avoid cultural, ethnic, or sex bias. (Reproduced courtesy of Task Force for Evaluation of Instructional Materials, P. O. Box 4004, Stanford, CA 94305.) Where possible, ask people of different backgrounds to review your draft audiovisual and print materials so that they can suggest any further changes to eliminate bias that your staff may have overlooked.

Omissions

1. Do the materials include the contributions and roles of both men and women, American Indians, Black Americans, Mexican Americans, Asian Americans, Jews, and other cultural and ethnic groups?
2. Are all socioeconomic levels and settings (urban, suburban, rural, etc.) included?
3. Is diversity in terms of religion, cultures (e.g., African and Asian as well as European), family structures, etc., included?
4. Are all the ethnic groups represented among the authors?

Portrayals

1. Do the materials provide for accurate information and portrayal of the contributions and roles of the above?
2. Do the materials portray the diverse groups from a multiracial, multicultural perspective without predominant values and attitudes of one group?
3. Do materials portray different religious orientations without being patronizing or sectarian?
4. Do content, approach, and illustrations provide for factual accuracy in the presentation of root cultures and subcultures? Do they avoid Eurocentrism?

Stereotypes

1. Are generalizations made about the behavior, physical appearance, dress, values, customs, etc. of a group of people or sex without regard to factual accuracy?
2. Do these generalizations perpetuate stereotyping and acquisition of misinformation?
3. Are there any negative portrayals of individuals or groups from which it would be logical to conclude that the individual was representative of a whole group (either by content, approach, or by virtue of the fact that a diversity of other stories or articles are not presented serving to illustrate that diversity exists in such groups or among such individuals)?
4. Must minority and/or female characters demonstrate extraordinary skills or talents in order to "compensate" for differences in order to be "accepted" by their non-minority and/or male peers? Is it therefore implied that in order to

be "acceptable" a person of difference must possess extraordinary skills or talents?

Minority People As Americans

1. Do content, approach, or illustrations portray minority people as being less American or not American? (Some situations and stories imply that non-Whites are not Americans, whereas Whites or European are. Other stories imply a degree of Americanism. For example, an Indian youngster may be introduced as an Indian and a White youngster as an American in a story. Later on, in an incidental sort of way, a statement may be made to the effect that the Indian is *also* an American.)
2. Do content, approach, or illustrations provide for a distinction between root cultures (i.e., those of another country) and American subcultures? In other words, stories about Asian Americans should be included in addition to those about Mexicans.

Great Literary Works

- i. Some people become upset when the works of persons whom they greatly admire and respect are shown to be biased or racist. In their unwavering devotion to such writers, some people fail to acknowledge the fact that writers, too, are human possessing the same frailties as others and subject to the prevailing sociologic forces of the time. Moreover, such "revelations" should not detract from the literary contributions such persons have made. Furthermore, it should be recognized when applicable that some such authors were ahead of their time albeit not up to measure using today's standards.
2. The questions which must be satisfactorily answered in terms of biased sexist and racist inclusions in literature are the following:
 - a. Is there assurance that students will be provided with sufficient background in order that they will be able to understand the author's perspective and the historicity of the inclusion?

- b. Are the children sufficiently mature to understand the historical context of the biased or racist inclusion?
- c. How will students regard persons in the classroom or in society whose group is portrayed?

General

1. Is the color black or the concept of darkness used in a negative context? Many sociologists feel that this concept lies at the heart of racial prejudice and until people come to grips with it racial strife will exist. Are other colors such as red and yellow also used in negative stereotypic ways?
2. Are opinions stated as fact or value judgments made inappropriately?
3. Are questions asked of students regarding cultures or minority groups which could not be answered on the basis of information provided students or teacher? Such questions often result in students drawing erroneous conclusions based on insufficient information and cultural bias.
4. Are inclusions accurate, when appropriate? In general, stories, articles, and illustrations should be portrayed in a manner which will help minority children and girls develop a sense of pride in their cultural ancestry and at the same time contribute to the education of Caucasian children with respect to acquiring a greater knowledge and appreciation of other races, cultures, etc.

Illustrations

1. Do illustrations perpetuate stereotypes and myths of various groups, etc.? Do illustrations imply obvious or subtle cultural attitudes and values, e.g., the treatment of beauty?

Characterizations

1. Do the main characters help children in identifying positively with respective heritage and culture?
2. Are minority people and women portrayed as central characters or in the main roles?

3. Are there situations in which minority children are presented in settings in which Caucasian children appear as well as in settings in which most of the children are minority?
4. Are there situations in which minority children and girls are shown in leadership positions in relationship to Caucasian children and boys?
5. Are non-Whites and women depicted in a variety of occupations including an ample number in the area of the professions?

Situations Dealing With Prejudice

1. Is it implied that being "different" is a negative attribute? The norm often used is that of trimness, Caucasian, Anglo-Saxon, Christian, middle class, tall, etc. Hence, any deviation from any one or a combination of those areas would be regarded as a reason for rejection or persecution.
2. Do characters behave towards one another in a hostile, negative manner due to differences based on race, color, creed, physical appearance, handicaps, etc.? In such stories, is it implied that prejudice based on color, etc., is a natural and acceptable way of behaving by omitting certain facts or not providing an adequate explanation of prejudice?
3. Are persecutors or perpetrators of prejudice held accountable for their behavior?
4. Could a minority child in a classroom be subject to ridicule as a result of the way in which that child's group or a member of that child's group is portrayed?
5. Is the image of diversity developed in such a way as to portray a total human being with strengths and weaknesses and an ability to respond to a contemporary (or historically appropriate time) situations, which includes multiracial, multicultural interaction?

O

READABILITY

Nearly all educators know something about readability, but not every developer has had experience in applying one or more of the well-known formulas. In preparing your packaged materials you should be concerned not only with the readability level of learner materials but also with the readability of the total package. Try to avoid use of unfamiliar, esoteric, or specialized terms.

This article (adapted from ERIC Chessboard, July 1976) pinpoints succinctly three formulas commonly used.

READABILITY *

Readability formulas first started appearing as early as the 1920s and gained in popularity in the late 40s and 50s. Reading specialists at first considered the new formulas as a solution for all reading problems. Although that view has since tempered, readability formulas are still widely discussed and used.

Essentially, readability formulas attempt to measure the reading ease of material by evaluating elements of language, most often vocabulary difficulty, sentence complexity, and interest value of words. In using most formulas, an evaluator first scores the individual language factors according to formula directions and then puts the separate scores into some sort of mathematical formula which yields a reading grade level. The end product of a readability formula is usually a grade-level score.

About 30 formulas are in existence with many variations of each. Three formulas, used most often, are probably more familiar to educators using readability formulas.

Dale-Chall Formula

Edgar Dale and Jeanne Chall first presented their formula in 1948. Since that time it has become popular and widely used. The formula itself is very thorough and extensive, yielding a fairly accurate grade level. However, it is more complicated and time-consuming than most other formulas. The Dale-Chall formula makes use of a 3000-word list to measure vocabulary load. Using the material to be evaluated, the investigator counts the number of words in sentences and counts the number of words not on their 3000-word list, then fits those figures into the formula from which a specific grade level is produced.

Fry Readability Graph

Edward Fry proposed his readability graph in 1965. It is now extensively used by classroom teachers. Classroom instructors find it a useful tool because it takes less time to use and is less complex. It involves selecting three 100-word passages from various parts of the material, counting the number of sentences in each passage, and counting the number of syllables in each passage. The average number of words per sentence and average number of syllables are computed and then plotted on Fry's graph which determines the grade levels of the passages.

* Adapted from the ERIC CHESSBOARD (July 1976)

Cloze Procedure

In 1953 Wilson Taylor developed the cloze procedure. This procedure has increased in popularity in the past few years. For this method the evaluator takes the material in question and deletes every fifth word. The student is then asked to complete the passage by determining the exact word that was deleted and replacing it. Minor misspellings are considered as correct answers. The percentage of items correctly "clozed" by the students is compared with a criterion scale to determine if the material is of an appropriate level for the students. Only functional reading levels are determined, not grade levels. This procedure is used to measure concept of idea density. For this reason, it is generally recommended that the cloze procedure rather than a formula be used with social studies materials. Normally, "cloze" is used for secondary materials and its modified version, "maze," is used for elementary materials.

Want More Information?

The following journal articles provide more in-depth information about readability formulas and procedures. Your library or reading center should carry these journals.

1. Dale, Edgar and Jeanne S. Chall, "A Formula for Predicting Readability,"
Educational Research Bulletin, No. 27, January 21, 1948.
2. Fry, Edward, "A Readability Formula That Saves Time," *Journal of Reading*,
No. 11, April 1968.
3. Klare, George R., "Assessing Readability," *Reading Research Quarterly*, Vol. 10,
No. 1, 1974-1975.
4. Taylor, Wilson L., "Cloze Procedure: A New Tool for Measuring Readability,"
Journalism Quarterly, No. 30, Fall 1953.

P

ANALYZING A PROGRAM

This material excerpted from an internal RMC Research Corp. memo (1976) includes much information that should be useful to projects preparing for packaging their exemplary programs.

FUNCTIONAL ANALYSIS

The information about projects that adopting sites have requested from RMC can be divided into the following categories:

- Effectiveness
- Instruction
- Management
- Estimating Costs
- Organization
- Personnel
- Materials/Equipment
- Facilities

Providing this information requires a) analyzing the project and b) writing the descriptive materials. Analyzing the project carefully is very important and we would make the following observations:

Analyzing the Project

- Someone is needed to serve as project analyzer, interviewing many project personnel. No single person (not even the project director) knows all the details of project operation.
- The analyzer should be an "outsider" since project personnel take many important project features for granted and don't think to mention them unless asked.
- The analyzer should not be seen as an authority figure by the project staff.
- Project personnel have a variety of viewpoints and may say conflicting things about the project. The project analyzer must have the experience and skills to sort out the various viewpoints and prepare an accurate project description.

Preparing the Materials

It may be helpful to ask the project director or teachers to write the sections on effectiveness, budgets, and materials. However, the remaining sections should usually be written by the outside project analyzer and then reviewed by the project staff for accuracy.

It is important to explain the objectives or rationales for project procedures as well as describing the procedures themselves.

Effectiveness

Most educators are concerned about project effectiveness data. Developer/Demonstrator sites may wish to include a summary of their report to the USOE Joint Dissemination Review Panel.

Instruction

Content

- Project's instructional process and classroom atmosphere.
- Methods for selecting and scheduling students.

Data Collection

- Observe several instructional sessions, considering the project from both the students' and instructor's points of view.
- Interview project staff about details of instructional process--procedures for assigning activities, recordkeeping systems, etc.

Presentation Methods

- Written description.
- Sound or videotape of instruction.
- Sample lesson plans, student folders.

Management/Communication

Content

- Lines of authority in the project.
- Management style and instructional role of the project director.
- Relationship between the project and district.

Data Collection

- Observe management style of project director.
- Determine how the project director fits into district hierarchy, and how he or she maintains "clout" needed to operate successfully.
- Observe communication patterns.
- Determine the amount of training and supervision necessary.

Presentation Methods

- Written description of procedures, with suggestions on gaining autonomy, hiring and training staff, and public relations.
- Duplicate of a year's events on a calendar.
- Tapes of phone calls, conferences (with permission).
- Sample memos, letters, etc.

Estimating Costs

Content

- A description of the minimum physical resources that would be required for the first year and succeeding years so that an adopting district can estimate their own project costs.
- A materials budget for first and succeeding years.

Data Collection

- Determine number of personnel in various categories, facilities, materials/ equipment (first year and succeeding years), and other special costs, such as transportation of students, field trips, etc.

Presentation Methods

- Worksheet with list of resources and space for adopting district to fill in cost estimates.

Organization

Content

- Types and numbers of project personnel, the numbers of schools and students served, and other special project requirements such as transportation.
- Recommended maximum number of students to be served during first year.
- Multiples of students and staff to use in enlarging project.

Data Collection

- Interview project staff.

Presentation Methods

- Written description.
- Diagrams.

Personnel

Content

- Roles, tasks, and time commitments of project personnel, and their necessary qualifications and skills.

Data Collection

- Interview each category of project staff about their own roles in the project, their experience, and their skills and attitudes.
- Interview project director about selection criteria used in hiring project staff.
- Interview principals and teachers whose students are being served by the project.

Presentation Methods

- Written description that distinguishes between minimal and optimal requirements and includes: selection criteria used by project director in hiring staff; specific skills and attitudes of project staff (not just "excellent teachers"); years of experience and/or degrees; other requirements, such as familiarity within the district.
- Sample résumés of project staff.

Materials/Equipment

Content

- Project requirements for commercial and teacher-made materials and equipment.
- Times when materials/equipment are ordered.
- Who controls materials budget.
- List of core items with which a project could operate the first year, and the instructional levels at which they're most useful.

Data Collection

- Survey classrooms and interview teachers.
- Determine frequency of purchase orders.

Presentation Methods

- Written description.
- Fact sheets that include complete ordering information and quantities required.

Facilities

Content

- Minimal and optimal requirements for physical space and furniture.
- Procedure and schedule for securing space.

Data Collection

- Observe location, size, lighting, and other significant features of project facilities.
- Interview staff.

Presentation Method

- Written description.
- Sample floor plan.

Writing Up Your Project

You have an approach, a project. Others all over the country may want to adopt it and they could demand more time than you can spare. You can answer many questions on paper or with other media. While developing Project Information Packages, RMC Research found the following points about data collection, analysis and writing helpful.

Data Collection

1. Each person knows his or her own job best--the aide knows more about the aide's job than the project director does. People very effective at their jobs don't necessarily reflect on what they are doing that works so well. So having a fresh person (for example, a district counselor or local graduate student) interview each person about his or her roles, skills, attitudes, and tasks help get the kind of complete information a new site needs to replicate your project. The analyst should have a position compatible with sorting out conflicting reports and observations. It helps if the analyst knows a wide range of projects so he or she can compare features and describe yours fully.
2. Your project probably is effective because of a complete system--administrative support, expert staff, adequate space and materials. No single gimmick is the answer a new district needs for success. People need to know how you arrange every aspect of the project, even if they will adapt it to suit their needs. They might find information gleaned from the following sources valuable:
 - memos to teachers, parents, or administrators
 - materials catalogues and invoices
 - budgets

- student progress records
 - lesson plans
 - schedules of time blocks
 - schedules of activities within a period
 - teacher logs
 - agendas of inservice training
 - sample teacher-made materials
 - anecdotes from teachers.
3. Observing instruction and considering what a child encounters in the project, also noting floor plan options, exact names of publishers and all materials and equipment in use will help compile needed information, too.

Analysis

1. You may have to create a schedule for starting up quickly based on the goals people will have to achieve the day school starts. When would they have to begin ordering materials, arrange for classrooms, and win support for installing the project? No one needs to repeat your history if it was long and hard.
2. You may need to invent training which would bring carefully selected staff to the standards of your effective teachers.

Writing

1. It helps new district staff if they have information divided for each person. Prepare a book for teachers with just the information they need, and a book for project directors with what they need.
2. Statements that are mainly jargon, such as "We individualize using a diagnostic-prescriptive approach," don't tell much. New districts need clear statements of what to do (tasks), when (dates) and why (objectives).
3. Samples of forms and progress records, both filled in as samples and blank for reproduction, are useful.
4. New sites soon want ownership of the project and have expressed objections to seeing developer site names (of cities, board members, project directors) on materials they use all year.
5. Listed points are often easier to read than dense text.
6. Project analysts should be available to help with the writing and project staff with the reviewing of materials you prepare.

Q

TEMPLATE

This sample shows what a template to guide a typist looks like. However, actual templates must be created anew for any typewritten copy, depending on page size, reduction planned (if any), and design idiosyncrasies.

Center
Line

Title line or first line of continued page

Warning line - 3 lines left

Last line

Page number line

IV-91

203

R

REDUCTION SCALING

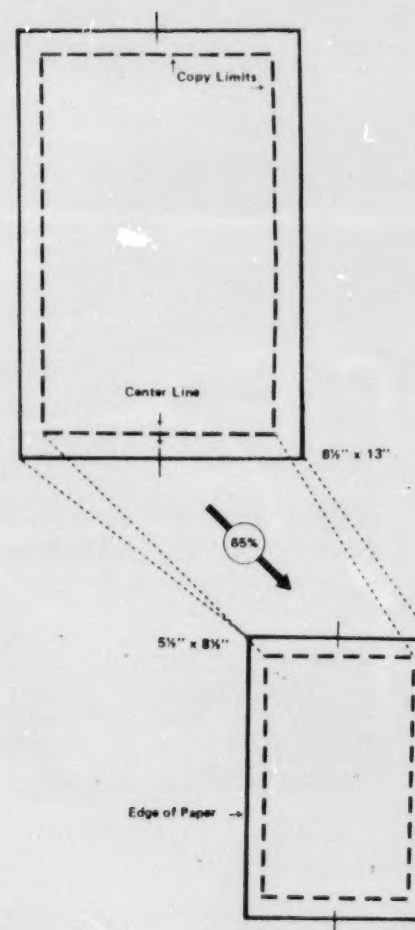
Two pages from a San Francisco Bay Area printer's guide demonstrate how simple it is to produce varied formats from type-written copy. (From "A Guide to Basic Offset Printing" prepared by Cleo's Printing & Copying, 1241 21st St., Oakland, CA 95607).

Time has shown that the following eight basic layout formats usually fill the needs of a high percentage of printing customers:

Layout Sheet Size:	Reduced To:	Gives a Finished Format:	Saving This % of Pages
5 1/2 x 8 1/2	Same size	5 1/2 x 8 1/2	-0-
8 1/2 x 11	Same size	8 1/2 x 11	-0-
6 1/2 x 10	85%	5 1/2 x 8 1/2	28%
10 x 13	85%	8 1/2 x 11	28%
7 1/8 x 11	77%	5 1/2 x 8 1/2	39%
9 1/8 x 11	77%	7 x 8 1/2	39%
11 x 14 1/4	77%	8 1/2 x 11	39%
8 1/2 x 13	65%	5 1/2 x 8 1/2	58%

Note that there are four formats which provide a finished size of 5 1/2 x 8 1/2, and three which provide a finished 8 1/2 x 11. Thus, there is a good deal of flexibility for these two common sizes, and it is easy to balance your requirements for type-size and your need for cost savings by picking the most appropriate initial layout format.

These basic layout sheets usually have pre-ruled lines, printed in non-reproducing blue ink--if the copy is kept within the area provided, attractive and functional margins are "built-in" to the final printing job. Of course, such consistent and well-planned margins are especially important to the overall quality of the job if there is to be any special bindery work required, such as drilling, stapling, folding, etc.



The sample reduction above demonstrates how much more copy can be printed on a finished sheet by using the proper layout sheet for the finished size.

S

PAGINATION

The Government Printing Office provides this planning sheet for use by its clients. For a self-cover booklet, the first box at the top left would indicate the outside front cover page. The next box would be the inside of the front cover. Then would come the title page, and so on. Ask a printer for help with this technical chore. See the filled-in sample that shows how some pagination directions for this manual were completed.

PUBLICATIONS PAGINATION

PUBLICATION TITLE			REVISION DATE
SIZE	PAPER	TYPE	PUNCH OR DRILL
NUMBER COPIES	BINDING INSTRUCTIONS		

PUBLICATIONS PAGINATION

PUBLICATION TITLE <i>Packaging Your Educational Program</i>		REVISION DATE <i>2/7/77</i>	
SIZE <i>8 1/2 x 11</i>	PAPER <i>60 lb book</i>	TYPE <i>Camera-ready</i>	PLUCK OR DRILL <i>NA</i>
NUMBER COPIES <i>1000</i>	BINDING INSTRUCTIONS <i>Spiral / Reduce to 8 1/2 x 11 A4 it where notes "full size"</i>		

Cover (full size)	(full size)	Title Page (full size)	Acknowledg ii	Table of Contents iii	iv
Preface v	vi	Introduction vii	viii	Introduction ix	x
Planning Your Budget (full size) I-A	Blank	I-1	I-2	I-3	I-4
I-5	I-6	I-7	I-8	I-9	I-10
I-11	I-12	I-13	I-14	I-15	I-16
I-17	I-18	I-19	I-20	I-21	I-22
I-23	I-24	I-25	I-26	I-27	I-28
I-29	Blank I-30	Staffing Budgeting and Scheduling II-A (full size)	Blank II-B	II-1	II-2

T

SLIDE/TAPE PRODUCTION

For more effective audiovisual production professional help may be sought. If, however, "do-it-yourself" is the only recourse, the following suggestions may add some zest to the finished presentation.

Tips on Producing a Slide/Tape Presentation

If you decide to make a slide/tape presentation, consider the following suggestions:

1. Decide who your audience will be and what your objectives are.
2. Organize and categorize your ideas.
3. Use single slides for titles and headlines, and to illustrate each point.
4. Keep slides in a horizontal plane.
5. Arrange the text to follow the visual path (left to right, top to bottom).
6. Avoid overuse of charts and graphs.
7. Use dark type against light backgrounds.
8. Use light colors against darker backgrounds for impact.
9. Select action visuals.
10. Mix visuals with type when possible.
11. Use conventional capitals and lower-case typography for ease of reading.
12. Play up individual roles. (Use of students to explain the program can be effective.)
13. Humanize buildings, tools, etc., by telling what happens there and how they are used.
14. Keep everything short and to the point (a long presentation will bore most viewers).
15. If a slide carries a full print message, don't repeat all the words on the sound track.

NOTE: If audio cassettes are integral to the teaching/learning process, try to record all the sound on a single cassette. Above all, don't start any sound audiovisual production until you have prepared, edited, and field tested a well-written script--short sentences, change of pace, absence of jargon, etc.--that won't bore those for whom it's intended. And remember -- color slides of smiling children posing with cheerful teachers tell the adopter almost nothing about your program!

U

COPYRIGHT CONSIDERATIONS

The legislation referred to in this article (reprinted from the May, 1976 issue of Social Education) was passed by Congress late in 1976. Hence, educators should attend closely to these guidelines enacted under this long-awaited Federal legislation.

Copyright Considerations in Teacher- and Student-Designed Learning Materials

Jerome K. Miller

In recent years, teachers have been encouraged to design and produce special learning materials for their students, or to engage students directly in the production of their own materials. Most schools recognize the value of such learning materials and provide some facilities for their production. In the process of creating these materials, some teachers and students are committing serious and repeated violations of the copyright law. Most do not break the law deliberately; violations usually stem from an ignorance of the teacher's or student's rights and limitations under "fair use." The US copyright law does not include a "fair use" section.¹ It was developed by the courts to modify the law. Being judicially developed, it is difficult to apply from one situation to another. The best explanation of the "fair use" doctrine is found in the copyright revision bill now before Congress. The bill has not passed yet, but it is generally agreed that the "fair use" section will pass in its present form. It is also considered a good guide to "fair use" copying under the present copyright law. The bill offers the following guidelines for copying by teachers and students:

1. The purpose and character of the use:

- a. Nonprofit educational users are given greater latitude than most other users.
 - b. "Spontaneous" copying by a teacher is viewed with greater latitude than "systematic" copying by the district.
 - c. Students have even greater latitude in copying materials for use in term papers, reports, etc.
 - d. Collections or anthologies of materials made under "fair use" become an infringement.
2. The nature of the copyrighted work:
 - a. Copying substantial parts of materials designed for public performance or exhibit (films, sheet music, plays, etc.) is beyond "fair use."
 - b. The availability of the work must also be considered. "Fair use" will be interpreted broadly for a work that is out-of-print or otherwise unavailable. "Fair use" must be interpreted strictly for materials available through normal supply sources.
 - c. Consumable materials like worksheets, standardized tests, etc. may not be copied.
 3. The amount and substantiality of the work copied:

It is acceptable to make one

copy of an article from an encyclopedia or magazine or a poem from an anthology, but it is not permissible to make multiple copies of any but the most minute part of a work.

4. The effect of the use on the potential market or value of the work:

If copying reduces the demand for a work, then it is not "fair use."

The following are examples of the application of these principles to common teaching situations, and answers to the question of whether or not there would be copyright infringement:

- Teacher A made twenty-five Xerox copies of an article from *Time* to distribute to his class for a discussion.

Answer: Making multiple copies of an article is a technical infringement, but one that is tolerated by the publishers of most major magazines. The copyright revision bill treats occasional, spontaneous copying of this nature, by teachers, as "Fair use."

- Teacher B made twenty-five copies of one article from each of three magazines. These were stapled together and distributed to students in a class.

Answer: This teacher probably infringed copyright because she created an "anthology" of copyrighted works. She should have asked permission from the publishers to copy and use the materials for her class.

- Teacher C made a Xerox copy of a chapter from a book and placed it on reserve in the library for his students to read. A week later he with-

¹U.S. Senate, Committee on the Judiciary, *Copyright Law Revision . . . Report* (Washington, D.C.: U.S. Government Printing Office, 1974) pp. 10-11, 115-120.

Copyright, 1976, Jerome K. Miller.

Readers may make multiple copies for nonprofit educational use. All other rights reserved.

Jerome K. Miller teaches media courses at the University of Illinois, Graduate School of Library Science. He is the chairperson of the copyright committees of the Association for Educational Communications & Technology (AECT) and the Consortium of University Film Centers (CUFC). He is the author of the "Copyright Today" column in Audiovisual Instruction.

drew it from the library and threw it away.

Answer: The important question centers on the amount of copying from the book. If the chapter represents a small part of the book, it was probably "fair use." If not, he should have asked permission from the publisher before making the copy. It is important to note here that the copy did not become a permanent part of the library collection or the teacher's files. If it had, there is a strong possibility that this could have constituted an infringement, even though the original copying fell within the limits of "fair use."

• Teacher D distributes a current events magazine to his classes every Friday. The magazine is published for in-school use and is sold to schools in bulk subscriptions. Financial problems force the school to terminate the subscription. The teacher obtains a copy from another school and duplicates the key articles for distribution to his class.

Answer: This is an infringement. Duplicating these highly specialized materials denies the publisher a legitimate sale. Poverty is no excuse.

• Teacher E takes many slides during her travels which she uses in her classes. She occasionally copies pictures from books to fill gaps in her slide collection.

Answer: The fact that the pictures she copies represent only a small part of her slide collection seems to absolve her of the "anthology" problem mentioned above. The main question is the manner in which the pictures she wishes to copy are protected by copyright. If each picture is separately copyrighted (as is often the case in *National Geographic*), then she may not copy them without permission. One may not copy a copyrighted work in its entirety under "fair use." If a number of pictures are protected by a single copyright, then she may copy a small part of them under "fair use."

• Teacher F videotapes the President's address to the nation to show to his class.

Answer: This is legal. Federal government publications, with a few exceptions, are in the public domain (not copyrighted). This applies to presidential addresses and press conferences and to Congressional hearings. He must be careful, though, not to copy

the network commentaries which follow the address as they are probably copyrighted by the network. (This is not, strictly speaking, an application of "fair use" since the programs are not copyrighted.)

• Teacher G videotapes a 30-minute CBS news documentary program for use in a class.

Answer: This appears to be an infringement. There is a grey area when the copying is done for the sole purpose of rescheduling an evening or weekend program for school hours and then erasing the tape promptly. This problem has not been resolved yet, and this writer does not encourage the practice. It is very clear, though, that videotaping programs off-the-air and retaining them for future use, without permission, is a major infringement. CBS offers low priced school licenses to videotape the CBS Morning, Evening and Weekend News; ABC offers similar licenses. PBS permits the duplication of certain programs, free of charge. Contact your local PBS (educational) station or your district TV Coordinator for a list of programs cleared for copying. Most TV news documentary programs are available in 16mm films from university film rental libraries. They are usually available six to twelve months after the first showing of the TV program.

• Teacher H is making a set of slides for an individualized instruction packet. He is unable to find two pictures he needs so he copies two frames from a 16mm film.

Answer: Films and filmstrips fall within the "performance" materials area of copyright. Very little copying is permitted from these materials under "fair use." In this instance, the amount that was copied was so slight (1/120th of a ten-minute film) that it may be considered "fair use."

• Teacher I made five copies of a work sheet from a workbook for students who were having difficulty with a particular unit.

Answer: Copying "consumable" materials, such as tests, work sheets and answer sheets, is always an infringement. They were designed and sold as single-use materials. Copying reduces the publishers' market for them, so "fair use" cannot apply. The only possible exception occurs when the consumable materials are out-of-print or otherwise unavailable through normal market channels.

• Teacher J asked her students to "tell a story in picture and verse." Many students copied a poem from an anthology and arranged pictures from magazines to tell their story. Some students who are interested in photography reproduced pictures from a variety of commercial sources. One enterprising student videotaped television programs off-the-air and edited them to tell his story. Several students used popular songs as background music for slide presentations.

Answer: Most if not all of these practices would be an infringement if the teacher had done them or had directed the students to make the copies. The fact that the copying was done voluntarily by students in the process of preparing an assignment probably falls within the realm of "fair use." It is important that the materials be returned to the students and not become a part of a school instructional materials collection. It is also important that they are not publicly "displayed" or "performed" by a television station, art gallery, etc.

Some readers may have discovered that they are violating the copyright law. They do not want to stop using the successful teaching materials, yet they want to act within the legal and ethical bounds of the copyright law. Teachers who find themselves in this position should resolve to limit copying to those applications that fall within "fair use." If the nature or the amount of copying in a particular situation is not "fair use," then write to the publisher seeking permission to copy the materials. Most publishers are very cooperative about granting permission for classroom use of their copyrighted property. An informative pamphlet about writing for permission is available free of charge from the Association of American Publishers, 1920 L St., N.W., Suite 750, Washington, D.C. 20036. The pamphlet, "Copyrighted Permissions: A Guide for Non-commercial Use," includes a simple, tested, one-page form for seeking permission to copy. The form can be duplicated for school use. Teachers are encouraged to write for the free pamphlet and to use the procedures it describes. ■

V

RELEASE FORM

Many different types of legal releases are used in photography and in audiovisual reproduction processes. A school district attorney should be consulted to be certain that any release created will actually meet legal requirements (invasion of privacy, etc.). If commercial distribution of a product is foreseen, more stringent stipulations may be required. The following release form is provided simply as a sample to alert educators to potential dangers inherent in still photography, film, and videotape production.

STUDENT RELEASE TO USE VIDEO TAPES, MOTION PICTURES, AUDIO TAPES AND STILL PHOTOGRAPHS
FOR EDUCATIONAL PURPOSES

Project: _____

Student: _____

Teacher: _____

School: _____

I hereby grant permission and authorize the FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT* and its assigns to take and use motion pictures and still photographs of my child (ward), named below, for the purpose of producing educational information and instructional materials.

I hereby release the FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT and its agents, employees and assigns from any and all claims for damages for libel, slander, invasion of the right of privacy, or any other claim for compensation based on the use of said material.

I further agree that I will make no claim for any consideration or damages, for such motion pictures or photographs on my own behalf or on behalf of my child (ward).

Dated: _____

Signature of Parent or Legal Guardian
(Specify which)

Name of Student

Address

City, Zip Code

Telephone

Witness

*The Far West Laboratory for Educational Research and Development is an educational laboratory established under the Elementary and Secondary Education Act of 1965. It is a non-profit, public institution designed to bring the benefits of educational research and development into the classroom at the earliest possible date.

W

PRICING

The following price sheet from the School Volunteer Project (Miami, Florida) breaks down their costs for reproduction of project materials and shows the final price charged to the user. Note how the final Starter Kit price was reached.

School Volunteer Development Project
Dade County Public Schools
1410 N.E. Second Ave.
Miami, FL. 33132

<u>Materials Cost Breakdown - Starter Kit</u>	<u>Materials Cost</u>	<u>Cost Charged</u>
Open to the Public	\$ 6.30	\$11.00
186 pages @ .02 per page		
dividers @ .25 per set		
binder @ 2.33		
Leader's Handbook	4.97	8.00
132 pages @ .02 per page		
binder @ 2.33		
Handbook for Teachers	.16	---
8 pages @ .02 per page		
Handbook for Volunteers	.34	---
17 pages @ .02 per page		
Handbook for Volunteer Chairmen	.56	1.75
28 pages @ .02 per page		
Modules in Action	3.75	4.75
instruction card @ .25		
filmstrip @ 1.75		
tape @ 1.75		
Module Mania	3.75	4.75
(see above)		
Administering a School Volunteer Program	2.45	3.25
36 pages @ .02 per page/tape @ 1.75		
Becoming a Leader in a School Volunteer Program	2.81	5.00
53 pages @ .02 per page/tape @ 1.75		
Using the Services . . .	2.15	3.25
20 pages @ .02 per page/tape @ 1.75		
Becoming a School Volunteer	2.55	3.25
40 pages @ .02 per page/tape @ 1.75		
Assisting in the Classroom	2.03	3.25
14 pages @ .02 per page/tape @ 1.75		
Tutoring in Reading and Mathematics	3.11	3.75
68 pages @ .02 per page/tape @ 1.75		
Building One to One Relationships	2.99	3.75
62 pages @ .02 per page/tape @ 1.75		
consumable pages	.80	
40 pages @ .02 per page		

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Materials Cost Breakdown - Starter Kit (con't)

	<u>Materials Cost</u>	<u>Cost Charged</u>
Helping Students Develop Appropriate Behavior 38 pages @ .02 per page/tape @ 1.75	\$ 2.51	\$ 3.25

Materials Cost Breakdown for Optional Materials

Assisting in the Library/Media Center 100 pages @ .02 per page + tape @ 1.75	3.75	4.25
Volunteering in Special Education 43 pages @ .02 per page + tape @ 1.75	2.41	3.25
Physical Education and the Volunteer 35 pages @ .02 per page + tape @ 1.75	2.45	3.25
Turn About--It's Your Turn To Teach 95 pages @ .02 per page + cover and rings	2.90	6.00
By Invitation Only 49 pages @ .02 per page binder @ 2.33	3.31	8.00
Listener Handbook 96 pages @ .02 per page + cover with spiral	2.92	6.00
Listener Films	<u>56.00 ea.</u>	<u>61.00</u>
TOTAL KIT	<u>\$41.21</u>	<u>\$55.00*</u>

* Includes: materials \$41.21, box \$1.80, postage \$3.40, processing \$8.50.



TYPEWRITER FACES

Typewriters can produce a variety of different-looking type faces when interchangeable typing elements are used. Some of the commonly available choices are shown here. Be sure that those you select will harmonize when combined.

LETTER GOTHIC

[@ # \$ % & * () _ +
] 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

SCRIPT

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

COURIER

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

SYMBOL

√ | { } ± ∇ ∫ () ∫ - ∫
1 2 3 4 5 6 7 8 9 0 - =

Γ Δ + O + T E + + & Π
Υ δ ε θ τ υ ζ ι ο ρ π

∇ Σ Φ < Λ Π > Ω ^ •
α σ φ (Λ η) κ ω ~ :

= ≡ ψ α ∞ ~ θ ^ + ∫
ζ χ ψ × β ν μ ~ ~ 1

LETTER GOTHIC

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

LIGHT ITALIC

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

COURIER ITALIC

[@ # \$ % & * () _ +
] 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

MT/SR

! † + \$ % / & * () - @
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

MANICOLD

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
Q W E R T Y U I O P !

A S D F G H J K L : "
A S D F G H J K L ; '

Z X C V B N M , . ?
Z X C V B N M , . /

ARTISAN

[@ # \$ % & * () _ +
] 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

z x c v b n m , . /
Z X C V B N M , . /

PRESTIGE ELITE

[@ # \$ % & * () _ +
] 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
q w e r t y u i o p !

A S D F G H J K L : "
a s d f g h j k l ; '

Z X C V B N M , . ?
z x c v b n m , . /

ORATOR

± @ # \$ % & * () _ +
1 2 3 4 5 6 7 8 9 0 - =

Q W E R T Y U I O P °
Q W E R T Y U I O P !

A S D F G H J K L : "
A S D F G H J K L ; '

Z X C V B N M , . ?
Z X C V B N M , . /

Y

TWO PACKAGING CASE STUDIES

Each development project tackles the packaging effort in its own way as a key part of its overall diffusion plan. Two short case histories are provided in the hope that some of the experiences recounted here will prove useful to others as they begin their own packaging endeavors. These examples were written by Dorothy Soper and approved by the project directors in each instance. A new developer may find it profitable to consult with an experienced project director who has worked with materials in a similar content area and/or with a nearby project that has completed an effective educational package currently being distributed.

CASE STUDY
PROJECT ACTIVE (Oakhurst, NJ)

Essential Elements

The project staff have developed an individualized-personalized (IP) program in physical education for handicapped students. The seven areas of instruction are: low motor ability, low physical vitality, nutritional deficiencies, postural abnormalities, breathing problems, motor disabilities or limitation, and communication disorders. The instructional requirements for each topic include the provision of 60 minutes of instruction per student per week for a minimum of 24 weeks per academic year; however, two 30-minute or three 20-minute periods are preferred.

Diffusion Plan

The project's diffusion goal is the installation of its program of IP instruction in at least one area per school with the anticipation that students' performance scores will be significantly superior to those of students who participate in traditional physical education plus classroom activities, or in classroom activities solely during comparable time periods.

To augment the project's diffusion potential, the staff offer several types of training programs. A 40-hour workshop is offered for those interested in all the project's instructional areas. Shorter workshops address fewer topics at a time. Workshops are held in the evenings, on weekends, during academic vacations so that trainees need not take time from instructional responsibilities, or during school time if requested by the district.

Project development occurred simultaneously in several districts. This mix gave the project director, a tenured administrator and teacher, experience in training many educators in several districts to use the program. The diffusion training staff include the project director and teachers from throughout the state whom he has trained in the project and whose implementation of it he has evaluated favorably. The project's diffusion budget provides the project director's salary and compensation for other trainers according to time worked. This arrangement gives the project director the ability to "expand" the amount of available training in response to demand.

Five state teacher training institutions accredit the project's training program for matriculated graduate students. A faculty member in one state college offers a course whose primary content is the instructional program developed by the project. This type of affiliation, which has lent some prestige to the project, may have been responsible for the relatively large sales volume of its materials.

Other incentives offered by the project director to potential adopters are a number of services that are linked. Included are: availability of consultation after training (usually by phone) in the interpretation of students' test results, formulation of individualized lesson plans, inservice visitations to ACTIVE sites, individual time prescriptions for each pupil, establishment of local norms, diagnostic and prescriptive guidelines

to assure appropriate placement and prescription, computerized analysis of all pre/post data submitted, achievement certificates for each handicapped child, and a newsletter prepared by the project director. The newsletter includes instructional information useful to project implementors.

Publicity for project materials and training was arranged in the state primarily by the director through professional organizations. This effort was supplemented by the state agency which arranged for the statewide distribution of project brochures, recognized with a certificate those who completed project training, and organized a few introductory workshops. For national diffusion, publicity was provided by state facilitators and by the project director at national educators' conventions.

Materials

The basic content of all project manuals was written and tested during the development years. After the project was validated, this material was rewritten in finished form. The project director first attempted to have this work done by committees of those who had worked as teachers and trainers. This effort was unsuccessful because few had had any writing experience. Therefore, the project director, who had had writing experience (he has published several articles and two books), wrote the manuals in their final form. Introductory materials, including a brochure and two filmstrip-tapes, were also prepared during this period. This effort required about 70% of his time during one academic year. All materials were reviewed for organization, clarity, and completeness by a person not affiliated with the project.

There was a substantial demand for project tests used to evaluate student performance. Prepared on ditto masters, these are now offered for sale.

In having the first manual printed, the project director had the text typewritten and arranged to have it printed by "moonlighters" who agreed to do this work in their spare time. This experience was frustrating because the printers took much longer than originally promised; also the quality of the printing was disappointing.

The project director had the text of subsequent manuals (and that of the first manual when reprinted) typeset in a way that allocates the same amount of space for each letter. This method is cheaper than "real" typesetting. This cost was justified because it would cut down the number of pages per manual and thus reduce the cost of both paper and postage. These savings offset the cost of the typesetting. Also, such costs can be passed along to purchasers; since high demand was anticipated, this argument was acceptable.

The artwork for the covers and the illustrations that accompany the texts of the manuals were done professionally.

Approximately \$20,000 was required to finance the initial printing of the manuals. Quantities, which varied between 1,000 and 2,000 (relatively cost-effective units), appeared warranted by anticipated demand.

As contrasted to what most projects have done, a training manual was the first manual prepared, because during the project's development years the director carefully articulated and evaluated training sessions. This was necessary since he used many trainers who were scattered throughout the state. Availability of this manual seems to have helped the project establish trainers in many states and throughout its state of origin.

The school district provided for the materials' distribution. Prices were based upon costs of printing, postage, envelopes, and boxes for mailing and salaries of clerical staff for handling. Only prepaid orders are accepted. The manuals are copyrighted in the name of the district in which the project originated.

A complete listing of materials is appended (p. IV-118).

Results of Diffusion Effort

Use of Staff Time

During the first year, most staff time was invested in preparing final drafts of written materials. Some awareness work and training were conducted. The project director, who felt this was too demanding, would have preferred to concentrate upon preparation of materials alone -- if he had had the opportunity to make the decision again. One reason is that, unlike some diffusion tasks, writing is extremely difficult, requiring close concentration and usually uninterrupted work periods. These conditions are difficult to maintain once a project is publicized. (ACTIVE staff caution others not to launch diffusion efforts until printed materials are ready.)

Once the materials were prepared, staff time was allocated to publicity, training, follow-up, etc. As the number of adopters grew, less time was allocated to publicity.

During the first and second diffusion years the project director worked half-time and had full-time secretarial and clerical support. Trainers were hired in accordance with demand.

Training

The project staff established criteria for success for project implementation and usually limited training sessions to persons who agreed to these criteria. The criteria referred to time, equipment, and administrative support required for instruction and to evaluation of project implementation and improvement (or change) in student performance. Project staff tested trainees at the end of each training session to ascertain the extent to which they had attained the competencies that were the goal of the training. Approximately 55% of the trainees in the "mini" courses and 63% of those in the "maxi" courses attained 80% of the competencies.

Several trainers in states throughout the country have been trained and have agreed to train others. These persons include school, state department, and college staff. Relatively large numbers of teachers have been trained throughout the country.

Implementation

Implementation is gauged by a form which trainees return to the project director (see p. IV-114). Prior to 1974, when training was held in-state contractual agreements to implement the program were honored by about 40% of those trained. "With the advent of austerity, the attrition rate has increased to a point where only about 25% continue the program." (This quote comes from p. 13 of the project's 1975-76 report.) The increased attrition rate does not seem to stem from the type of training offered nor has it affected

sales of project materials. The attrition seems to have increased due to larger classes and less money for equipment.

Student Gains

Statistically significant gains in student performance as a result of the project have been measured in several New Jersey districts. Seventy-five districts continue to evaluate student performance. These districts include rural, suburban, and urban populations. Several out-of-state districts are carrying out such evaluations.

Materials

The training manual and the teacher's manual on low motor ability have been reprinted. They were revised slightly before being reprinted. The large demand seems to indicate the high quality of the material, the relative lack of similar material on the market, the fact that the topic of low motor ability is applicable to large populations beyond that of the handicapped child, and the publicity available to the project through the National Diffusion Network.

Costs charged are kept as low as possible to assure access for all. Reprint costs have often been reduced, making it easier to recover outlays. Most, but not all, of the cost of reprinting has been covered by sales receipts. Monthly sales have averaged \$2,000; through January 1, 1977, ACTIVE sales have exceeded \$35,000.

The project director found that it was often more cost effective to ship project materials by United Parcel Service rather than via U.S. mail.

The project's diffusion headquarters is the originating district (including, of course, the schools that were part of the development effort). Visitation opportunities exist in several districts throughout the state and nation. These satellite sites welcome visitors and conduct training. This arrangement has not posed any special difficulties.

The project's diffusion budget has been:

1974-75	\$ 76,670	
1975-76	73,500	(state funds)
	20,000	(Title III, Section 306, funds)
	\$170,170	

PROJECT ACTIVE

ALL
CHILDREN
TOTALLY
INVOLVED
EXERCISING



INSERVICE PROGRAM
FOR PHYSICAL EDUCATION-
RECREATION TEACHERS
OF
HANDICAPPED

Project No. 72-341, Title III, ESEA, P.L. 89-10

Director - Dr. Thomas M. Vadola

(201) 229-4100 Ext. 260

EVALUATION FORM: IMPLEMENTING DISTRICTS

Name _____ School or Agency _____ Date _____

School Address _____ Phone () _____

1. What aspect(s) of the ACTIVE program have you adopted? _____

2. Please list number of students involved, grade level(s), and handicapping condition(s).

<u>No. of Students</u>	<u>Grade Level(s)</u>	<u>Handicapping Condition(s)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. To what extent was the program successful? Explain. _____

4. How many teachers were involved in "turn-key" training? (Also indicate area of certification.)

(Number)

(Certification)

5. Please list the specific school(s) involved, address(es) and contact person(s).

<u>School</u>	<u>Address</u>	<u>Contact Person</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

TOWNSHIP OF OCEAN SCHOOL DISTRICT, DOW AVE., OAKHURST, N. J. 07755

ADOPTER EVALUATION FORMS
Township of Ocean School District

Project ACTIVE

Project No. 72-341, Title III, ESEA
8/73

FIELD-TESTING IMPLEMENTATION FORM* (Please type or print)

Program Implementer _____
Last Name First Name Position School
School Address _____
Street City Zip Code Area Code Phone No.
School District _____ County _____
Chief Administrator _____
Position Last Name First Name Title
Mailing Address _____
Building Street City Zip Code

PROGRAM

Date of Program Implementation _____ No. of classes scheduled _____
School(s) Program Implemented _____
Grade Involvement: K-6 _____; 7-12 _____; K-12 _____; Other _____
Specify _____

Subjects Classified As: (Record number of subjects by classification.)

	Male	Female		Male	Female
Mentally Retarded	_____	_____	Orthopedically Handicapped	_____	_____
Visually Hand.	_____	_____	Chronically Ill	_____	_____
Auditorily Hand.	_____	_____	Emotionally Disturbed	_____	_____
Communication Hand.	_____	_____	Socially Maladjusted	_____	_____
Neurologically Hand.	_____	_____	Multiply Handicapped	_____	_____
Perceptually Imp.	_____	_____	Other (specify)	_____	_____
Low Physical Vit.	_____	_____	Low Motor Ability	_____	_____
Posture Abnormal.	_____	_____	Nutritional Deficiency	_____	_____

SCHEDULING

Participating Students Are Taught In:

Separate classes _____ Unrestricted Program _____
Other (specify) _____

Weekly Instructional Time (Indicate time in minutes)

K-6 _____ 7-12 _____ 9-12 _____ K-12 _____ Other _____
specify _____

Class size is:

1-10 _____ 11-15 _____ 16-30 _____ Other (specify) _____

*Please complete and submit at Orientation Meeting, September 8,

ADVISORY COUNCIL

Date of Formation _____

Council Members:

Name

School Position

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

INSERVICE/ORIENTATION PROGRAM(s)

List Public Relations Techniques to be Utilized _____

MISCELLANEOUS INFORMATION

Did you have an individualized physical education program for your handicapped prior to Project Active? Yes _____ No _____

What problems do you foresee that may detract from the quality of the Program? _____

How can the Title III Project Director be of further assistance? _____

Do you have any noteworthy news you would like to include in a future issue of our Newsletter? If so, specify. (Please restrict to two paragraphs.) _____

Would you be in favor of on-site visitations by other teachers/administrators? Yes _____ No (Circle one)

If response is "yes," please attach schedule of day, time, and classification of students. (Visits will be prefaced by a phone call)



INSERVICE TEACHER TRAINING PROGRAM

6/75

ESLA, Title III
Project No. 72-341

TRAINEE EVALUATION FORM

Training Site _____ Instructors _____ Date _____

Check One ☐ Motor Workshop ☐ Teacher Training Workshop ☐ Other _____

(Cite) _____

Directions: Please rate each phase of the training program on the basis of the rating scale on the bottom of the page.

A. TEACHING MODEL KIT

POINTS

1. Quality of the training manual(s). _____
2. Quality and sufficiency of the resource materials. _____

B. PRACTICUM EXPERIENCES

3. Structure of the competency-based experiences. _____
4. Sufficiency of the practicum experiences. _____
5. Variety of handicapping conditions available. _____
6. Quality and sufficiency of diagnostic experiences. _____
7. Quality and sufficiency of the prescriptive/evaluative experiences. _____

C. INSTRUCTORS

8. Clarity of the lectures. _____
9. Quality of the competency demonstrations. _____
10. Quality and sufficiency of trainee supervision, assistance, and guidance. _____

TOTAL _____

COMMENTSOutstanding Program FeaturesRecommendations

- | | |
|----|----|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

RATING SCALE

2
Poor4
Fair6
Average 2308
Good10
Excellent

ACTIVE MATERIALS LISTING

ORDER FORM

Name _____ Address _____ City _____ State _____ Zip Code _____ Date _____

PAYMENT MUST ACCOMPANY THE ORDER OR THE ORDER FORM OR PURCHASE ORDER WILL BE RETURNED

Quantity	Description	Unit Price	Amount
	Teacher Training Manual	7.50	
	Low Motor Ability Manual	6.00	
	Low Physical Vitality Manual	4.00	
	Nutritional Deficiencies Manual	4.00	
	Postural Abnormalities manual	4.00	
	Motor Disabilities or Limitations	4.00	
	Communication Disorders Manual	4.00	
	Breathing Problems Manual	4.00	
	Motor Ability Duplicating Masters	1.00	
	Forms Test, Administrative, Requests Duplicating Masters	3.00	
	Motor Ability Resource Tasks and Activities	.50	
	Physical Fitness Resource Tasks and Activities	.50	
	Motor Ability Filmstrip	5.50	
	Teacher Training Filmstrip	5.50	
	ACTIVE Evaluative Design	No Fee	
	Research Evaluation Report, 1973/76	No Fee	
	Technical Brief	No Fee	
	Film: A Child Involved Date Requested	Alternate Date	No Fee
	Film: The Hidden Handicap Date Requested	Alternate Date	No Fee

All checks are to be made payable to: BOARD OF EDUCATION, TOWNSHIP OF OCEAN SCHOOL DISTRICT and mailed with the above order to:

Dr. Thomas M. Vodola, Director, Project ACTIVE, Township of Ocean School District, Dow Avenue, Oakhurst, N.J. 07755

EDUCATIONAL PROGRAMS THAT
WORK - A TECHNICAL GUIDE

- PRESENTATION OF MATERIALS TO THE STUDENT
- EVALUATION OF THE PROGRAM
- RESEARCH AND EVALUATION REPORT, 1973/76
- TECHNICAL BRIEF



OTHER ACTIVE MATERIALS

- *Evaluative Design*: Cites essential adoption elements necessary for successful replication. **No Fee**

- *Research and Evaluation Report, 1973/76*: Provides evaluative design and statistical tools applied to achieve national validation. **No Fee**

- *Technical Brief*: Presents an overview of the program, its goal and the competencies attained as a result of training involvement. **No Fee**

- *ACTIVE Newsletter*: Monthly publication which serves as a communication vehicle for adopter districts and agencies. **No Fee**

PUBLICATIONS PENDING 1976/77¹

- *Research Monograph*: A compilation of research studies related to the individualized personalized effort, with implications for programming and subsequent research.

- *Administrator's Manual*: Guidelines for organizing and administering the ACTIVE program.

- *Motor Ability/Physical Fitness Norms Manual*: A compilation of New Jersey and national norms based on chronological age (normal population) and mental age ("classified" population) i.e., M.R., L.D., etc. Also includes simplified procedures for establishing local norms.

- *Facilities/Teacher Resource Manual*: A compilation of sites, contact persons, products and services for teachers of the hand impaired.

¹ Sale prices to be determined at a later date.

SUMMARY OF TRAINING GIVEN BY PROJECT STAFF, 1975-76*

Training as prescribed in proposal (according to essential elements necessary for program transfer listed in proposal)

a. Summary of Training

1- <u>First year:</u>	<u>New Jersey</u>	<u>Other States</u>
# of districts	40	50
# of schools	48	104
# of teachers	132	65
# of administrators	2	16
# of parents (if applicable)	0	0
# of others (specify, i.e., aides, members of Bd. of Ed., etc.)	0	0
	5 aides	

2- Continuing adopters - Training either by project staff or by local district trainers; specify.

	<u>NEW JERSEY</u>		<u>OTHER STATES</u>	
	<u>By project staff¹</u>	<u>By local district staff²</u>	<u>By project staff</u>	<u>By local district staff</u>
# of schools	14	8		
# of teachers	15	14		
# of administrators	2	0	NOT APPLICABLE	
# of parents or others (specify)	0	0		
# of students involved	0	0		
# of districts	9	1		

3- Turnkey trainers (not associated with local districts)

	<u>New Jersey³</u>	<u>Other States</u>
# of districts	40	16
# of schools	48	31
# of teachers	132	58
# of administrators	2	-
# of parents & others (specify)	-	-
# of students involved	1,000	1,846

¹ Inservice for continuing adopters

² Turnkeying within the district

³ Assuming each new trainee turnkeys one staff member

*From End-of-the-Year Report: ACTIVE on the Move, 1975-75.

CASE STUDY
DALE AVENUE PROJECT (Paterson, NJ)

Essential Elements

The Dale Avenue Project is a comprehensive developmental skills' hierarchy for early childhood education, prekindergarten through third grade. There are three elements basic to its total use:

1. Use of the Dale Avenue Performance Objectives as a pre and post diagnostic test of student skill and development.
2. Use of the Performance Objectives as the basis of student curriculum through third grade.
3. Involvement of students' parents in a program that includes their orientation to the use of the Performance Objectives and their assuming roles as volunteers in the classroom as teachers' aides, in the school library, and as guides to visitors to the school.

Diffusion Plan

The project's diffusion goal is the implementation of the project in adopter districts with the anticipation that improvement in reading and mathematics scores of project students will be statistically significant compared to that of students in control classes. To provide for as many implementations as possible the project staff prepared written materials to explain the program to administrators and teachers and provide training as required for staff of adopter districts and faculty of teacher-training institutions. The originating school was also available to accommodate visitors one per week. Responsibilities for making awareness presentations were assumed by project staff. Distribution of awareness material was carried out by the state education agency and state facilitators of the National Diffusion Network. Project written materials were distributed by the state education agency. The project was fully funded for diffusion for four years. Target audiences in the first and fourth years were and are statewide. Those in second and third years were nationwide.

For a school in which instruction is individualized, the project materials are sufficient for implementation, provided that adopter district staff offer adequate training, time for teachers to plan, and ongoing supervision and support to teaching staff. For schools in which local staff wish project staff to provide initial training and follow-up consultation, a three- to five-day training program is available with four to eight consultations per year over a two-year period.

In the second year of providing follow-up consultation to an adopter district, project staff work with local staff to help them plan and offer training. This strengthens the administrative support available for the project at an adopter site.

Materials

In three years of development the Performance Objectives were prepared, tested, and refined; thus they were immediately available to publish in a durable and attractive format. They were supplemented by a teacher's and an administrator's manual which did not exist previously. Three other items to support teachers' use of Performance Objectives were prepared: a roll book, learning activities keyed to Performance Activities, and a manual of tests to ascertain student mastery of Performance Objectives.

Preparation of these items, plus a detailed report of development years and an introductory brochure, occurred in the first year. Approximately one staff member working half-time on the materials was required. Materials were reviewed for clarity, organization, and completeness by persons beyond the project staff.

In the second year of diffusion a 30-minute 16mm film was prepared as a visual introduction to the project. In the third year a kit was prepared to provide materials for diagnostic tests of two areas of the Performance Objectives. And in the fourth year an additional booklet is planned: descriptions and photographs of learning stations to go along with the Performance Objectives. The film, used for introductory presentations, and the supportive written materials were warranted by the level of demand and by frequent needs of instructional staffs in adopter districts.

The materials are:

Dale Avenue Performance Objectives Manual, 68 pp.

Teacher's Guide, 72 pp. This is sold only with the Performance Objectives Manual.

Manual on Special Area Performance Objectives: Art, Home Economics, Music and Physical Education, 72 pp.

Learning Activities for the Dale Avenue Performance Objectives; 267 cards boxed for easy reference.

Test Manual to Accompany the Performance Objectives.

Record Book for Recording Individual Student Progress, 36 pp.

Administrator's Guide, 88 pp.

Final Project Report, 96 pp.

Classification and Seriation Kit

Copy for all manuals and the learning activity cards was typewritten, except for a few introductory pages in the manuals. The text was printed in black ink on white paper. The distinguishing aspect is that the materials have attractive and colorful professionally designed covers. The covers have a consistent design with a photograph of three children as a "logo" for the project, but differ from one another in color and, of course, title. This appeared to be the most economical way to have the materials printed and yet have them appear in a highly readable and reasonably attractive form. Printing was professionally done. All covers are "soft" except that of the Performance Objectives themselves. This manual has hard covers and a large wire binding that permits the manual to stand on its own for easy reference.

When the items were initially printed, cost projections for lots of 500, 1,000, and 2,000 were made. The most economical lot size consistent with budget and estimated demand was selected for each item. This meant that the manuals were printed in varying lot sizes from 500 for the Administrator's Manual and box of learning activities to 2,000 for

the Performance Objectives Manual. During the second and third years of availability each item had to be reprinted because of sales. Most, but not all, of the cost of reprinting was covered by sales receipts.

Because the school district was unable to provide for the distribution of the materials, this task was assumed by the state agency. Prices were based upon costs of printing, postage, envelopes and boxes for mailing, and clerical staff time for handling. All materials are copyrighted in the district's name.

Results of Diffusion Effort

Use of Staff Time

In the first three years of diffusion the "development" staff of four full-time professionals and one secretary remained on the job with additional consulting assistance available from regular school staff. This staffing was consistent with funds available; the diffusion effort could have been carried out on a smaller scale with fewer staff members.

In the first year of diffusion effort most staff time was allocated to preparation of materials and awareness activities, including accommodation of visitors at project's site, presentations at conferences, etc., and detailed discussions with potential adopters. The first training session was conducted in the summer after the first diffusion year. In the second and third years of diffusion allocation of staff time shifted, with most time allocated to training and offering follow-up consultation to adopters. Less publicity work was required of the staff -- although they did continue to do this -- because the project was well known in the state and the National Diffusion Network assumed some of the task outside the state.

Training

Project staff established "criteria for success" for project implementation at other sites. Training was available to adopters only when these criteria were met to the satisfaction of project staff. This became the basis upon which agreements for services were formulated between project staff and potential adopters. This, project staff believed, was the most effective way to allocate their limited time.

The length of the training program varied with adopter needs and the staff time at adopter sites that was made available. As project staff found that some aspects of the training program could be explained in writing, they did so to free themselves for other work. On the basis of this type of experience the Classification and Seriation Kits were developed and a booklet on learning stations is being planned. Project staff plan to write a manual on training per se; presently discussion of the topic is included in the Administrator's Manual.

Projecting Demand for the Project

In initial planning for discussion, staff projected significant interest in the project since it was consistent with current developments in individualizing instruction and early childhood education. This offset to some extent the fact that full implementation was exceedingly demanding. Further, it was felt that the project's promising results with

urban children would produce significant interest. This reasoning has been justified by the sales figures of materials and the demand for training. An unexpected result of diffusion has been that a large number of rural and suburban districts have adopted the program and purchased the materials. Possible reasons include: districts that serve these populations are usually relatively small and can make decisions faster; such districts are already more likely to be individualizing instruction since they adopt new educational techniques faster than do urban districts (these two reasons are of course related); and the program seems to address universal requirements of learning. Had the program been tested with varying populations during development the last reason would have been anticipated earlier.

As the time approached for reprinting materials, each item was revised as required to correct errors or to improve utility based on comments of purchasers and staff experience in training and monitoring adopters.

Evaluation of Diffusion

Since the diffusion effort began, the project has made a strenuous effort to gather two types of data from adopters. One is data on project implementation (i.e., to what extent is it actually used?). The other is data on the way in which project children benefit (i.e., cognitively and/or in other ways). The project has also continued to test a sample of children at its originating site and a sample of those who went through its curriculum and then, in fourth grade, went into varying schools and programs within the district. These data were essential to continue to measure the long-term educational impact of the project as well as both feasibility and impact of use elsewhere.

For the first two diffusion years, implementation was measured subjectively by project staff who monitored adopter districts. In the third year of diffusion, a checklist was devised for use by both administrators in adopter districts and project staff to measure implementation more concretely.

Student's cognitive performance was measured by standardized tests. Where possible, results were compared to a control group in the same district.*

Results are available through the 1974-75 academic year. Results through the 1975-76 academic year are not yet available; but when they are, they will be correlated with degree of implementation. The latter will be measured both within an adopting school or district as well as from district to district. Project staff believe that the generally positive results have convinced some educators to adopt the project. (Note that as a result of the evaluation of implementation and student performance through 1974-75, the definition of essential project elements was changed, with one element previously thought to be essential dropped.)

In the judgment of some, the film has been "nice" to have but its usefulness cannot be justified on a cost basis. It has not been useful in non-urban districts where the population is not largely black. Often parents, teachers, or administrators in rural or suburban districts have difficulty accepting the idea that a program that worked well for urban blacks can also work well for their pupils.

* A discussion of how an administrator can evaluate student cognitive growth and also forms for teachers to evaluate pupils and a parent evaluation program may be found in the Administrator's Manual, pp. 49-57.

LEA Situation

For the first three years of diffusion the project operated from the school and district of its origin. This situation was in most respects good, especially because it allowed visitors to see the project in operation. The limitations, however, included district inability to arrange for distribution of materials and staff travel restrictions.

Diffusion Budget:

The project is receiving state support for diffusion for a fourth year and is based in a regional center of the state agency. Adopter schools in the state provide visitation opportunities for interested persons to see the project in operation. The state agency still maintains responsibility for materials' distribution. This situation has allowed project staff greater freedom and flexibility.

Project diffusion budget has been:

1973-74	\$ 139,140	(statewide diffusion)
1974-75	84,800	(state funds)
	21,380	(Title III, 306 funds)
1975-76	85,000	(state funds)
	20,000	(Title III, 306 funds)
1976-77	60,000	(approximately)
	<u>\$ 410,320</u>	

The project's initial investment to have materials printed in 1973-74 was \$25,000. In 1975-76 the cost of reprinting materials was \$20,000, half of which was covered by sales receipts.

Association with Colleges

Project staff trained four faculty members of a state teacher training institution in the project's use. They, in turn, offered to sixteen students a 3-unit summer course (1976) called "Individualization Through a Sequential Curriculum." Ten students planned to use the project in classrooms in the 1976-77 academic year.

Training Program Outline

Outline of training program offered by the Dale Avenue staff to staffs of adopter districts:

1. Project's rationale.
2. Theory of early childhood development.
3. Dale Avenue Performance Objectives.
4. Teaching and testing with Performance Objectives.
5. Use of project Record Book.
6. Parent reporting form.
7. Grouping children for instruction.

8. Individualization of instruction (techniques).
9. Parent Involvement.
10. Description and analysis of teaching materials for Performance Objectives.

Training lasts 3-5 days, depending upon needs and availability of adopter district staff. The first three topics are covered by lecture; the others are covered with attendees and involve the testing and teaching of children from the adopter district.

DALE AVENUE PROJECT
Paterson, New Jersey
Summary Sheet

Validated, 1973
Approved for national
dissemination, 1973
Three years of
dissemination

Project use in Paterson:*

2 schools
23 teachers
650 students, grades Pre-K-3

The Project's use in the Dale Avenue School is supported by the Board of Education through local and ESEA Title I funds.

Summary of training provided and sale of project materials, 1974-75:

Training

	New Jersey	States other than New Jersey: 5	Totals
Districts	2	6	8
Day care centers	5	1	6
Teachers	68	76	144
Administrators	5	10	15
Others	12	80	92
Schools	6	7	13
Approximate number of students to be involved in the program	530	1,179	1,709

Materials

Between 400 and 1,000 copies of each item (six manuals, one activities kit) were sold.
Total sales receipts were approximately \$10,000.

* June, 1976 figures

Summary of project implementation, June, 1975:

Project implementation in June, 1975, based primarily upon training provided in 1973 and 1974, is summarized below. These data are based upon on-site observations of the project staff.

	New Jersey	States other than New Jersey: 2	Total
District	7	4	11
Day care centers	8	1	9
Teachers	187	46	233**
Schools	32	6	38**
Approximate number of students involved	3,522* grades Pre-K-3 plus special educa- tion	952 grades K-3	4,774

Four implementations in New Jersey were partially supported by ESEA Title III grants ranging in amount from \$4,700 to \$18,600.

* In addition, approximately 741 students are involved in the project's implementation in the 8 New Jersey day care centers. These implementations, however, are judged incomplete by the project directors.

** As of December, 1976, 160 schools and 527 teachers are using the program.

Analysis of project implementation and student performance in adopter districts:

All district staffs trained in 1973 and 1974, with the exception of those of other schools in Paterson, have maintained the project's implementation. Some have required more consultation than anticipated largely because of a lack of administrative support and guidance for the project. The project director reports that the project's implementation in the New Jersey day care centers is incomplete due primarily to lack of administrative support. No adopters use the project special reading program although all teach reading in a manner usually consistent with the project. Three adopters, the Diocese of Paterson and districts of Trenton and Plainfield, conducted their own in-service training for the project's expansion among their staffs.

Evaluations of student growth in the cognitive domain, grades K-3, in Trenton, Plainfield, Mannington, and Spotswood showed positive growth in each case. Statistically significant growth compared to that of a control group occurred for kindergarten students in Trenton.

In all four districts students performed on at least one test at the end of the academic year at a level comparable to that of students in the Dale Avenue School. It should be noted that while the project was field tested with urban children, these evaluations were carried out with urban, suburban, and rural populations and positive student growth measured in each case. Student evaluations in these districts are being carried out in 1975-76.

Since student cognitive growth has occurred without the use of the special reading program, and since adopter districts find it difficult to implement this aspect of the project usually because of staffing difficulties, there is sound evidence that this should be dropped as part of the definition of the project's essential elements.

Based upon these evaluation data the project staff is stressing the importance of adopter districts' providing adequate administrative support and gaining teacher support of the program before training is offered. The project's definition of adequate administrative support includes the provision of planning time for teachers, ongoing staff supervision, and support in the form of continued inservice.

Analysis of continued student evaluation in the producer district:

A random sample of students in the Dale Avenue School in prekindergarten through third grade was tested with the Peabody Picture Vocabulary Test. The mean IQ score of the prekindergarten children was 78; mean score for each of the other grade levels was at national norm. These data substantiate what has continued to happen at the Dale Avenue School since the project's inception. Entering students have mean IQ scores well below the national norm. After one or two years in the program mean IQ scores are at the national norm and this level is maintained through the third grade.

A random sample of twenty-eight pupils, who had completed Dale Avenue third grade in June, 1974, and returned to various other schools in Paterson, was tested in May, 1975, on the Peabody Picture Vocabulary Test and the Peabody Individual Achievement Test. The mean IQ was at the national norm, 101. The mean achievement score including reading and math and general information was 5.3. Since they were in the 9th month of fourth grade, the expected grade norm was 4.9. This was the first group of children who had completed five years of the Dale Avenue project. The hope had been that the mean of the group would remain at the national norm. Instead, the mean was four months above the grade norm.

These data show that students who had come through the program maintained mean IQ, reading, and mathematics scores at or above the national norm.

Dale Avenue Project
Materials Distributed

	1974-75	1975-76		
	Number Sold	Number Sold	Funds Received	Free Distribution
Performance Objectives Manual and Guide	838	588	\$4,704.	
Special Area Manual	686	350	875.	
Box of Activities	610	441	6,615.	
Test Manuals	799	556	1,936.	
Record Books	1,041	760	1,140.	
Administrator's Guides	440	187	654.	
Final Reports	Distributed free	110	275.	
(Kits) Classification/Seriation	Not Available	70	210.	
Brochures				Approx. 1,000
Film				Approx. 50 times
TOTAL			\$16,409.50	

RECOMMENDED READING FOR DIFFUSION & PACKAGING

Baldrige, Victor, and Robert Burnham. "Organizational Innovation: Individual, Organizational, and Environmental Impacts." Administrative Science Quarterly, vol. 20, June 1975, pp. 165-176.

A research study suggesting that large, complex organizations with heterogeneous environments are more likely to adopt innovations than small, simple ones in relatively stable homogeneous environments.

Berelson, Bernard, and Morris Janowitz (eds.). Reader in Public Opinion and Communication (Second Edition). N.Y.: Free Press (1966).

A classic compilation of traditional readings, well worth reviewing.

Berman, Paul, et al. Federal Programs Supporting Educational Change. (Vol. IV: The Findings in Review.) Santa Monica, Calif.: Rand Corporation (1975).

A change-agent policy study that looks at problem-solving motivation, Federal monitoring, local institutional settings, project characteristics, implementation outcomes, and much more.

Brigham, Nancy. How to Do Leaflets, Newsletters, and Newspapers. Somerville, Mass. (60 Union Square): New England Free Press (1976).

Ideas for various kinds of leaflets, scheduling, layout, paste up, editing, etc. Useful index of terms.

Clarkson, Glenn, and Robert Warpinski (eds.). Forms and Formalities: A Resource. Washington, D.C.: USOE, National Diffusion Network. Available Iowa-Nebraska State Facilitator (1976).

Contains samples of forms for needs assessment, adoption/adaptation agreements, applications, adoption monitoring, awareness evaluation, training workshop evaluation, site visitation evaluation, etc., plus some sample newsletters.

Dissemination Analysis Group. Educational Dissemination in Relation to Public Elementary and Secondary Schools. Washington, D.C.: Dept. of Health, Education and Welfare (Sept. 1976).

The Education Division's new policy paper ranges over wide areas within the diffusion domain.

Eastman Kodak Company (ed.). Help Your Community...Through Photography. Rochester, N.Y.: Eastman Kodak (1973).

"How-to" text for those planning to use photos for publicity, fund-raising, and other facets of public service.

Eastman Kodak Company (ed.). Planning and Producing Slide Programs. Rochester, N.Y.: Eastman Kodak (1975).

A simple introductory paperback for those planning to produce filmstrips.

Engel, James F., et al. Promotional Strategy (Third Edition). Homewood, Ill.: Richard D. Irwin (1975).

Very much commercially oriented so perhaps of limited usefulness in the non-profit sector. Also assumes user/buyer will be an individual consumer.

Giacquinta, Joseph B. "Status Risk-Taking: A Central Issue in the Initiation and Implementation of Public School Innovations." Journal of Research and Development in Education, vol. 9, no. 1, 1975.

Insight into why participation works, why it doesn't always work, and why innovations are often watered down rather than adopted intact.

Gilmour, F.T. A Guide to Making a Display. Williamsport, Pa.: RISE, Williamsport Area School District.

Formats, construction, mounting, portability, lettering, and other "how-to" recommendations.

Havelock, Ronald G. The Change Agent's Guide to Innovation in Education. Englewood Cliffs, N.J.: Educational Technology Publications (1973).

A process guide that focuses upon change from within the school system, with emphasis on the administrator's role. The annotated bibliography, though out of date, is useful for someone new to the field.

Hutchins, C.L. Educational Development Case Study. ERIC ED#-043-515 (1971).

Documents the planning, development, testing, revision, and production of an elementary science information unit, with cost data and other useful details.

International Paper Company. Pocket Pal: A Graphic Arts Production Handbook. New York City: International Paper Co. (220 E. 42nd St., N.Y. 10017) (1970).

Covers art and copy preparation, photography, binding, paper, inks, technical terminology, etc.

James, C.R., et al. Developer's Guide: Preparing Materials for Distribution. Columbus, Ohio: Ohio State University Press (1976) (National Center on Educational Media and Materials for the Handicapped).

Includes information on selecting and targeting materials, insuring reproduction feasibility, and complying with legal requirements. Excellent bibliography.

Klein, Susan S. Toward Consensus on Minimum Criteria for Educational Products. Paper delivered at annual meeting of AERA, San Francisco, Calif. (April 21, 1976).

A discussion of what little is known about criteria used to make various decisions about types of products -- in terms of desirability, practicality, intrinsic quality, development, user effects, and spinoffs.

Kotler, Philip. Marketing for Nonprofit Organizations. Englewood Cliffs, N.J.: Prentice-Hall (1975).

Perhaps the most useful book a linking agent or change agent can read at the present time. Covers market analysis, pricing, distribution, planning and control, etc.

Laird, Dugan. A User's Look at the Audio-Visual World. Fairfax, Va.: National Audio-Visual Association (1973).

How to select the proper medium, choose a vendor, understand performance standards, handle maintenance, etc. Excellent bibliography.

Lazer, Wm., and Eugene J. Kelley (eds.). Social Marketing: Perspectives and Viewpoints. Homewood, Ill.: Richard D. Irwin (1973).

Reading Chapters 3, 6, and 8 and skimming other chapters (according to personal taste) will get you to the heart of this book.

Melcher, Daniel, and Nancy Larrick. Printing and Promotion Handbook. N.Y.: McGraw-Hill (1966).

How to plan, produce, and use printing, advertising, and direct mail.

Piele, Philip K. Review and Analysis of the Role, Activities, and Training of Educational Linking Agents. Eugene, Or.: ERIC Clearinghouse on Educational Management (1975).

A discussion of three overlapping types of linking agent: resource linker, process helper, and solution giver. Appendices provide several useful sets of references.

Pool, Ithiel de Sola, et al. (eds.). Handbook of Communication. Chicago, Ill.: Rand McNally (1973).

Communication studies for the social scientist. A diligent practitioner can find research-based information on communication systems, persuasion, mass media, public opinion, advertising research, and much more. The extensive references may prove highly useful as stimuli for further probing. (More than 1000 pages of text.)

Riso, Ovid (ed.). Sales Promotion Handbook (Sixth Edition). Chicago, Ill.: Dartnell Corp. (1973).

One of a series of useful handbooks that includes Marketing Director's Handbook and Public Relations Handbook. In each case you must adapt the how-to information to a nonprofit perspective.

Rogers, Everett M., and F. Floyd Shoemaker. Communication of Innovations (Second Edition). N.Y.: Free Press (1971).

"Must" reading on diffusion, social change, research traditions, the innovation-decision process, persuasion, rate of adoption, adopter categories, organizational change, etc.

Sikorski, Linda A., et al. Factors Influencing School Change. San Francisco, Calif.: Far West Laboratory (1976).

What research and practice have established about the local change process and special strategies for diffusing and implementing innovations.

Turnbull, Brenda, et al. Promoting Change in Schools: A Diffusion Casebook. ERIC ED#-090-679. (1974).

Case studies on diffusion of educational innovations that illustrate different approaches to stimulating widespread adoption and use of new programs and products.

U.S. Office of Education. A Practical Guide to Measuring Project Impact on Student Achievement. Supt. of Documents (stock # 017-080-01460) (1975).

Points out, among other items, common hazards in evaluation, selecting an evaluation model, securing and analyzing data, reporting results.

U.S. Office of Education. Educational Programs That Work (Third Edition). Available from Far West Laboratory (September 1976).

Brief descriptive information on projects approved by the Education Division's Joint Dissemination Review Panel; appendices include useful mailing addresses.

U.S. Office of Education. Transferring Success. (Being accessed by ERIC).

A collection of more than 50 case studies, drawn from the experience of those working in the National Diffusion Network, that illustrate change-agent roles and functions ranging from the awareness stage through match-making and decision-making and training, then on to institutionalization.

Watkins, R.W., and C.L. Jenks. Values & Information: An Approach to Evaluation Planning. San Francisco, Calif.: Far West Laboratory (1976).

This handbook for adopters (program directors, evaluators, district staff) of Experience-Based Career Education may prove useful to others as a model or a source of evaluation ideas.

Zaltman, Gerald, et al. (eds.). Creating Social Change. N.Y.: Holt, Rinehart and Winston (1972).

Selected readings on cause, change agency, change target, channel, and change strategies, as well as on organizing, planning, implementing, and controlling efforts. The book emphasizes a model-building or systems approach in health and social services, politics, race relations, education, etc.

DEFINITION OF DISSEMINATION

For the past several years, the Office of Education (OE) and the National Institute of Education (NIE) have been working to improve educational dissemination. A Dissemination Policy Council (DPC) was established and charged with clarifying or establishing dissemination policy. A special study group, the Dissemination Analysis Group (DAG), has developed the following definition to cover the full range of dissemination activities. Each of the four levels are rationally related since each level assumes that the previous ones are being undertaken.

- Level 1: Spread -- The one-way casting out of information, products, ideas and materials, "as though sowing seeds."
- Level 2: Exchange -- The two-way or multi-way flow of information, products, ideas, and materials, as to needs, problems, and potential solutions.
- Level 3: Choice -- Facilitating rational consideration and selection among those outcomes of research, development, effective educational practice, and other knowledge that can be used for the improvement of education.
- Level 4: Implementation -- Facilitating adoption, adaptation, installation, and the sustaining of improvements.

The first two levels apply to dissemination as communication; the third and fourth refer to those dissemination activities designed to facilitate use.